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Report by
THE TARIFF BOARD

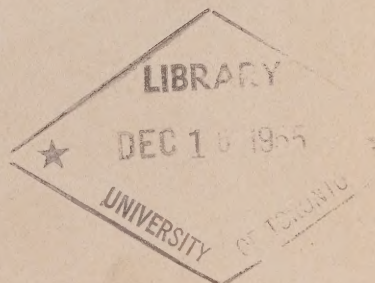
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*Relative to the Investigation Ordered
by the Minister of Finance
respecting the Production, Consumption,
Marketing, Imports and Exports of*

POTATOES

.

Reference No. 117






Report by
THE TARIFF BOARD

*Relative to the Investigation Ordered
by the Minister of Finance
respecting the Production, Consumption,
Marketing, Imports and Exports of*

P O T A T O E S

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Reference No. 117



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THE TARIFF BOARD

Reference No. 117

OTTAWA, November 5, 1955.

The Honourable,
The Minister of Finance,
Ottawa

Dear Mr. Minister: *Reference No. 117*

In accordance with your direction to the Tariff Board to conduct an investigation respecting the Production, Consumption, Marketing, Imports and Exports of Potatoes, —

I have the honour to transmit herewith, for tabling in Parliament under the provisions of Section 6 of the Tariff Board Act, the Report of this Board in connection with the aforesaid Reference, in English and in French. A copy of the transcript of the evidence presented at the public hearing accompanies this Report.

Yours faithfully,

H. B. McKINNON
Chairman

Foreword

In connection with the Investigation conducted in respect of Reference No. 117, the Tariff Board desires to record its appreciation of assistance given by various Departments and Agencies of the Public Service and to acknowledge, in particular, the co-operation extended by Dr. J. F. Booth, Dr. A. E. Richards, Mr. A. H. Turner, Miss M. I. Dunbabin, Mr. R. M. Scott, Mr. W. L. Porteous, Mr. E. G. Paige, Mr. W. C. Way, Mr. D. C. Armstrong and Mr. W. R. Butland of the Department of Agriculture; Mr. Herbert Marshall, Dominion Statistician, and Mr. C. V. Parker, of the Dominion Bureau of Statistics; Mr. G. A. Scott of the Department of Transport; and Mr. Rand H. Matheson, (then) Executive Manager, Maritime Transportation Commission.

THE TARIFF BOARD

Reference No. 117

An Inquiry into the Potato Industry in Canada

The letter from the Minister of Finance, dated April 22, 1955, directing the Tariff Board to conduct the inquiry which is the subject of this Report, was as follows:

I have received numerous representations to the effect that there has been a significant increase in imports of potatoes in recent years, and that this has caused serious concern among Canadian potato producers. In these representations it has been urged that the Customs duty on potatoes be increased and that the period to which the seasonal duty applies be extended.

The present tariff rates applicable to potatoes in their natural state are as follows:

<i>Tariff Item</i>	<i>British Preferential Tariff</i>	<i>Most- Favoured- Nation Tariff</i>	<i>General Tariff</i>
71d Seed potatoes, imported for use exclusively for propagation purposes, under regulations by the Minister	Free	Free	Free
83 Potatoes, as hereunder defined:—			
(a) In their natural state:—			
August 1 to June 14, inclusive, per one hundred pounds.....	Free	Free	75 cts.
June 15 to July 31, inclusive, per one hundred pounds.....	Free	37½ cts.	75 cts.

In view of the representations referred to above, the Government will wish to have in its possession the most complete information that can be obtained regarding the production, consumption, marketing, imports and exports of potatoes, and regarding the effects on Canadian producers and consumers of the operation of the Canadian tariff relative to potatoes in their natural state.

I therefore direct the Tariff Board to make a study, under Section 4(2) of the Tariff Board Act, of the matters referred to in the preceding paragraph and to report to me.

Yours very truly,

W. E. HARRIS.

The formal request for action by the Parliament of Canada, as presented at the public hearing by the Canadian Horticultural Council and those who made representations in support thereof, including the Canadian Federation of Agriculture and the Manitoba Farmers' Union, was:

- (1) That tariff item 71d, providing for free entry of seed potatoes, be deleted; and
- (2) That tariff item 83(a) be so amended in wording as to cover *all* imports of potatoes (i.e.—seed and table stock) and with rates appertaining thereto as follows:

<i>B.P. Tariff</i>	<i>M.F.N. Tariff</i>	<i>General Tariff</i>
Free	37½ cts. per cwt.	75 cts. per cwt.

Tariff items 71d and 83(a) as at present operative are as follows:

<i>Tariff Item</i>	<i>Description</i>	<i>B.P. Tariff</i>	<i>M.F.N. Tariff</i>	<i>General Tariff</i>
71d	Seed potatoes, imported for use exclusively for propagation purposes, under regulations by the Minister	Free	Free	Free
83	Potatoes, as hereunder defined:—			
	(a) In their natural state:—			
	August 1 to June 14, inclusive, per one hundred pounds	Free	Free	75 cts.
	June 15 to July 31, inclusive, per one hundred pounds.....	Free	37½ cts.	75 cts.

A public hearing was held at the offices of the Tariff Board, Ottawa, on Monday and Tuesday, June 13 and 14, 1955. A list of those who entered appearances on that occasion will be found in the Appendix (Schedule A) hereto; and a transcript of all information then laid before the Board is attached to the copy of this Report intended for the Table of Parliament.

A history in detail of the tariff treatment of potatoes in Canada over a period of 25 or more years will be found in the Appendix (Schedule B) hereto.

Incidental to the investigation, members of the Board inspected potato-growing areas in Prince Edward Island, New Brunswick, Manitoba, Alberta and British Columbia; and in the States of Maine, Minnesota, North Dakota, Idaho and Washington.

Since most of the data re imports, exports, production, prices, etc., have been assembled for their historical as well as their current significance, no attempt has been made in the preparation of the various Tables to include statistics relative specifically to Newfoundland.

THE PRODUCTION, SALE AND MARKETING OF POTATOES IN CANADA

While encyclopedists may differ among themselves as to whether its original habitat was Spain, Chile, Peru or yet some other area of the globe, there is perhaps no vegetable better known throughout the Occidental world than the ordinary or common Potato. Throughout Europe and the Americas, it has been for several centuries not only a basic item of agricultural production but universally regarded as an almost indispensable article in the dietary of man. In Canada, from the earliest days of settlement, it has held almost pride of place among field crops, and even today probably no agricultural enterprise engages the activities of more Canadians than does the growing of potatoes.

PRODUCTION

In Canada:

Potatoes are grown with varying degrees of success in nearly every settled community throughout Canada, regardless of climate, latitude or type of soil. The Census of 1951 recorded that potatoes were produced on more Canadian farms than any other field crop with the exception of oats and hay (with which they are frequently related in the rotation series). First among vegetables, they rank fifth among all field crops in gross dollars earned. The real value of the industry, however, is doubtless substantially greater than the official figures would suggest, since many thousands of garden patches and plots of less than one acre go unrecorded.

One striking fact about Canadian potato production is that it is now on very nearly the same level as it was in the early years following Confederation. Of all Canadian field crops, only potato production has not grown with the growing population and the great expansion of agriculture. The consumption (apparent domestic disappearance) on a per capita basis is very small compared with what it was in the latter part of the nineteenth century. The following table shows the production of potatoes in the census years and the average for the past four calendar years, compared with the population growth:

Table No. I (Bushels)

<i>Year</i>	<i>Production</i>	<i>Population</i>
1871	47,330,000	3,689,257
1881	55,369,000	4,324,810
1891	53,491,000	4,833,239
1901	55,363,000	5,371,315
1911	55,461,000	7,206,643
1921	62,230,000	8,787,949
1931	87,175,000	10,376,786
1941	61,731,000	11,506,655
1951	48,361,000	14,009,429
1951-54 av.	56,440,000	14,781,000 (1953)

During this period, 1871-1951, the acreage of improved agricultural lands in Canada rose from 17 to 97 million acres, and the value of field crops increased nearly twenty times.

Importance of Crop Varies:

Notwithstanding the rather ubiquitous nature of this crop, potato culture on what might be regarded as a commercial basis is concentrated in certain fairly well defined regions. Consequently, the relative importance of the crop varies widely, not only from province to province but also within each province. For instance, while New Brunswick in 1953 produced only 20 per cent by volume of the Canadian crop, the gross value* of potatoes to the farmers of that province was infinitely more significant, representing roughly 27 per cent of the total gross value of their principal field crops; potatoes accounted for over 80 per cent of the cash income** from all principal field crops. Well over 50 per cent of the total New Brunswick potato acreage lies within two counties, Carleton and Victoria. British Columbia, on the opposite coast, produced, in the same year, only five per cent by volume of Canada's potatoes, whose gross value was 15·03 per cent of the gross value of all British Columbia field crops and accounted for 31 per cent of the cash income from field crops. In that year, less than three per cent of the total field crop acreage in British Columbia was planted to potatoes while in New Brunswick potatoes occupied 5·4 per cent of the total. Commercial potato production in British Columbia is largely confined to municipalities close to Vancouver and in the Grand Forks area.

Table No. II—Production, Seeded Acreage, Farm Price and Farm Value of Potatoes, 1953, and Value of Potatoes expressed as a % of Provincial Income from Field Crops

	Production	% Total	Seeded Acreage	% Total	Yield Bus. Acre	Average Farm Price	Total Farm Value	% Total	% of Prov. Field Crops Total ¹
Canada.....	67,002,000	100·0	321,100	100·0	208	0·79	52,717,000	100·0	
Prince Edward Island.....	10,647,000	15·9	39,000	12·1	273	0·48	5,111,000	9·7	30·67
Nova Scotia.....	2,864,000	4·3	12,400	3·8	231	0·85	2,434,000	4·6	14·28
New Brunswick.....	13,988,000	20·9	48,400	15·0	289	0·43	6,015,000	11·4	26·76
Quebec.....	16,600,000	24·7	100,000	31·1	166	0·85	14,110,000	26·7	9·57
Ontario.....	11,883,000	17·7	63,000	19·6	188	1·07	12,715,000	24·1	4·12
Manitoba.....	3,196,000	4·8	18,800	5·8	170	0·63	2,013,000	3·8	1·15
Saskatchewan.....	1,677,000	2·5	12,800	4·0	131	1·30	2,180,000	4·1	0·34
Alberta.....	2,757,000	4·1	15,400	4·8	179	1·28	3,529,000	6·7	1·15
British Columbia.....	3,390,000	5·0	11,300	3·5	300	1·36	4,610,000	8·7	15·03

¹ Does not include forest and maple products or tree fruits.

SOURCE: Dominion Bureau of Statistics Revised Estimates of Production, Value and Stocks of Principal Field Crops 1953 and 1954—February 1955.

As Source of Farm Income:

The Table above gives a fairly clear idea as to which provinces of Canada depend on potatoes as a principal source of farm revenue. It also reveals some rather striking differences in relative income. The Maritime Provinces, as a region, in 1953, produced 40·1 per cent of all Canadian production. This production was achieved on 30·9 per cent of the total seeded acreage but resulted in a return to Maritime producers of only 25·7 per cent of the farm value of the Canadian crop. The average prices received in Prince Edward Island and New Brunswick, in 1953, indicate what can happen price-wise to an area whose farmers are almost wholly dependent on outside markets and whose products must travel a considerable distance to reach the market.

The Provinces of Ontario and Quebec together produced 42·4 per cent of the total potato crop, using 50·7 per cent of the seeded acreage and receiving 50 per cent of the total crop value. These provinces are net importers of potatoes, which fact is reflected in the much higher average farm prices received.

* That is, farm production x average price at the farm.

** Revenue from sale of farm produce, exclusive of produce used or consumed.

As is commonly known, potatoes are not an important field crop on the Prairies. Total production for the three Prairie Provinces together in the same year amounted to only 11.4 per cent of the nation's crop. Yields, in the main, are low, and the value of the crop in relation to the other field crops is very small. In Saskatchewan, as might be expected, the potato crop represented about one-third of one per cent of the total value of provincial field crops.

British Columbia, on the other hand, enjoyed a total potato income only 10 per cent below that of Prince Edward Island, from less than a third of Prince Edward Island's production, and using less than 30 per cent of the Island's acreage. It will be observed that British Columbia growers received in that year, as is usually the case, the highest farm price in Canada.

Even in those provinces where the potato industry occupies a place of minor importance, considered against the national background, there exist groups of market gardeners and specialist growers, relatively few in number, who derive a major part of their income from potatoes. To these must be added a very large group of farmers who, while in no sense dependent on income from potatoes, nevertheless obtain cash revenue from this source. The 1951 Census showed that of the 623,091 occupied farms in Canada in that year, potato growing found a place on 366,118.

Potatoes will grow in most soils, but they are perhaps best adapted to sandy and medium loams and to a cool moist climate. However, light sandy soils are by no means essential to potato growing. Notable successes have been made in yields on much heavier soils (Red River Valley) and in peaty land.

It is characteristic of the potato-growing industry of Canada that, with the exception of Prince Edward Island, the main areas of production border similar potato-growing areas of the United States. Consequently, most Canadian potato growers have competitors immediately across the border, since nature, climate and soils ignore political boundaries. Hence, the valley of the Saint John River nurtures the potato industry of both New Brunswick and Maine, the largest surplus producing areas of Canada and the United States, respectively. The Red River Valley contains the potato-growing areas of North Dakota, Minnesota and Manitoba; and the Canadian waters of the Columbia irrigate the potato lands of both British Columbia and the State of Washington. In effect, therefore, the late-potato belt may be said to "straddle" the Canada-United States boundary. This close proximity of Canadian producing regions to the large late-crop producing areas in the United States compounds the problems of Canadian growers and will be the subject of further comment later in this Report.

A statistical history, 1908-1954, of the acreage, production, yield, average farm price and total farm value of potatoes is shown in Table No. III; and of potato production, 1930-1954, by provinces, is shown in Table No. IV:

Acreage v. Prices:

Acreage seeded to potatoes in Canada has varied greatly from year to year, largely in response to yields and price changes. "There is probably no other crop in the production of which the farmer is more quick to react to changes than in the case of potatoes. Potatoes are a food product with a highly inelastic demand at the consumer level. This in turn results in comparatively violent changes (in prices) from year to year at the farm level, which quickly bring about the farmer's response in acreage adjustments. Price changes the year previous to seeding are of most importance, but even the price changes of the year, two years previous to seeding, are also of importance." (Evidence: page 112—Dr. E. C. Hope.) That a similar relationship exists across the border is confirmed by current United States investigations.

**Table No. III—Potatoes—Canada—Acreage, Production, Farm Price
and Value, 1908-09 to 1955-56**

Crop Year	Seeded Acreage	Average Yield per Seeded Acre	Production	Average Farm Price	Total Farm Value
	acres	bu.	000 bu.	\$ per bu.	\$ 000
1908-09.....	504,000	146.5	73,788	0.47	34,819
1909-10.....	514,000	193.3	99,088	0.37	36,399
1910-11.....	465,000	119.3	55,461	0.49	27,427
1911-12.....	481,000	148.5	71,422	0.59	42,478
1912-13.....	484,000	175.3	84,885	0.44	37,329
1913-14.....	474,000	165.8	78,542	0.49	38,418
1914-15.....	476,000	180.0	85,673	0.49	41,598
1915-16.....	486,000	124.2	60,352	0.61	36,460
1916-17.....	473,000	133.8	63,297	0.80	50,982
1917-18.....	657,000	121.7	79,892	1.01	80,804
1918-19.....	735,000	142.0	104,346	0.98	102,235
1919-20.....	819,000	153.3	125,575	0.95	118,894
1920-21.....	785,000	170.7	133,831	0.97	129,803
1921-22.....	702,000	153.0	107,346 ³	0.77	82,148
1922-23.....	684,000	135.8	92,909	0.54	50,320
1923-24.....	561,000	164.8	92,495	0.61	56,418
1924-25.....	562,000	168.2	94,413	0.51	47,956
1925-26.....	522,000	128.3	67,028	1.24	82,860
1926-27.....	523,000	149.5	78,228	0.88	69,204
1927-28.....	572,000	135.3	77,430	0.70	54,341
1928-29.....	599,000	139.7	83,658	0.49	40,874
1929-30.....	544,000	122.3	66,550	0.95	63,372
1930-31.....	571,000	140.7	80,402	0.50	39,858
1931-32.....	592,000	147.3	87,175	0.26	22,359
1932-33.....	522,000	126.0	65,693	0.38	24,920
1933-34.....	528,000	135.0	71,242	0.46	33,092
1934-35.....	569,000	140.8	80,158	0.30	23,822
1935-36.....	507,000	127.2	64,450	0.48	30,854
1936-37.....	502,000	131.5	66,023	0.68	45,125
1937-38.....	531,000	133.5	70,912	0.38	26,650
1938-39.....	522,000	115.0	59,897	0.55	33,093
1939-40.....	518,000	116.7	60,650	0.68	41,065
1940-41.....	545,000	130.0	70,500	0.50	35,394
1941-42.....	479,500	128.7	61,731	0.75	46,234
1942-43.....	467,400	141.6	66,183	0.91	60,143
1943-44.....	484,300	137.5	66,580	1.07	71,412
1944-45.....	471,000	156.4	73,644	0.91	67,198
1945-46.....	439,100	121.0	53,116	1.34	71,333
1946-47.....	445,700	156.1	69,594	1.02	71,133
1947-48.....	408,200	155.2	63,769	1.31	83,103
1948-49.....	400,800	184.6	73,993	0.98	72,749
1949-50.....	389,400	181.8	70,800	0.91	64,292
1950-51.....	369,600	197.6	73,041	0.74	54,329
1951-52.....	284,900	169.7	48,361	2.03	98,088
1952-53.....	296,800	202.4	60,071	1.68	100,784
1953-54.....	321,100	208.7	67,002	0.79	52,717
1954-55.....	296,200	169.9	50,326 ²	1.26 ²	63,616
1955-56 ¹	306,300	177.4	54,334	.....	.....

¹Crop Estimate August 30, 1955.

²February, 1955, Estimates. (The Tariff Board Estimate of Average Farm Prices, as of July 31, 1955, was \$1.6.).

³The census figure for this year (Canada Year Book, 1954, page 1263) is given as 62,230,052.

SOURCE: Dominion Bureau of Statistics.

Table No. IV—Canadian Production by Provinces, 1930 to 1955
(000 Bushels)

	1930	1931	1932	1933	1934	1935	1936
Prince Edward Island.....	7,998	8,140	5,313	6,267	8,040	5,075	6,568
Nova Scotia.....	5,563	3,243	3,537	3,110	4,088	3,477	3,262
New Brunswick.....	9,755	10,568	6,427	8,990	11,563	7,305	9,472
Quebec.....	22,485	28,162	19,125	22,407	23,740	18,897	20,560
Ontario.....	18,275	20,070	15,860	16,853	19,717	13,130	15,467
Manitoba.....	4,428	4,667	3,187	3,833	3,813	4,333	1,677
Saskatchewan.....	4,787	4,033	4,913	3,808	2,385	5,882	2,725
Alberta.....	4,227	4,627	3,503	3,093	3,062	3,177	3,027
British Columbia.....	2,883	3,665	3,828	2,880	3,750	3,175	3,267
CANADA.....	80,402	87,175	65,693	71,242	80,158	64,450	66,023
	1937	1938	1939	1940	1941*	1942	1943
Prince Edward Island.....	5,785	6,403	7,400	7,632	5,372	8,426	6,056
Nova Scotia.....	3,142	2,543	3,388	3,855	3,162	4,100	2,210
New Brunswick.....	9,622	6,787	8,398	11,493	8,820	10,620	16,260
Quebec.....	20,763	16,595	17,895	21,875	18,000	16,445	16,420
Ontario.....	16,817	12,427	12,078	11,255	12,915	11,638	11,696
Manitoba.....	4,135	3,190	3,360	2,973	4,980	3,541	3,812
Saskatchewan.....	2,187	5,482	2,868	4,247	3,301	5,176	3,605
Alberta.....	4,650	3,478	2,032	3,103	2,653	3,720	3,070
British Columbia.....	3,812	2,992	3,230	4,067	2,528	2,517	3,451
CANADA.....	70,912	59,897	60,650	70,500	61,731	66,183	66,580
	1944	1945	1946	1947	1948	1949	1950
Prince Edward Island.....	8,451	7,827	9,599	9,428	10,107	12,980	10,684
Nova Scotia.....	4,387	2,607	3,521	2,211	3,234	3,151	3,216
New Brunswick.....	16,170	10,727	15,118	14,604	15,402	16,899	15,129
Quebec.....	21,207	12,281	15,000	13,486	18,538	15,330	18,256
Ontario.....	12,658	10,956	14,760	11,970	15,426	13,584	15,110
Manitoba.....	2,016	2,190	2,214	2,663	2,556	2,085	2,826
Saskatchewan.....	2,754	1,641	2,152	2,635	2,289	1,535	1,833
Alberta.....	3,088	2,280	3,419	3,072	3,114	2,108	3,075
British Columbia.....	2,913	2,607	3,811	3,291	3,327	3,128	2,912
CANADA.....	73,644	53,116	69,594	63,360	73,993	70,800	73,041
	1951	1952	1953	1954	1955 ¹		
Prince Edward Island.....	5,920	10,800	10,647	9,176	10,373		
Nova Scotia.....	2,034	2,760	2,864	2,497	2,706		
New Brunswick.....	9,525	10,974	13,988	10,123	12,502		
Quebec.....	12,739	13,755	16,600	11,408	10,499		
Ontario.....	9,662	11,276	11,883	9,492	9,628		
Manitoba.....	2,244	2,751	3,196	1,800	2,000		
Saskatchewan.....	1,923	1,847	1,677	1,054	1,300		
Alberta.....	2,354	3,256	2,757	1,900	2,600		
British Columbia.....	1,960	2,652	3,390	2,876	2,726		
CANADA.....	48,361	60,071	67,002	50,326	54,334		

*Revised Figures on the Basis of 1951 Census, from 1941, forward.

¹Crop Estimate August 30, 1955.

SOURCE: Canada: Department of Agriculture.

Table No. V and Chart No. 1, as presented at the hearing by Dr. Hope, are of interest:

Table No. V—Annual Changes in Acreage and Farm Price of Potatoes in Canada

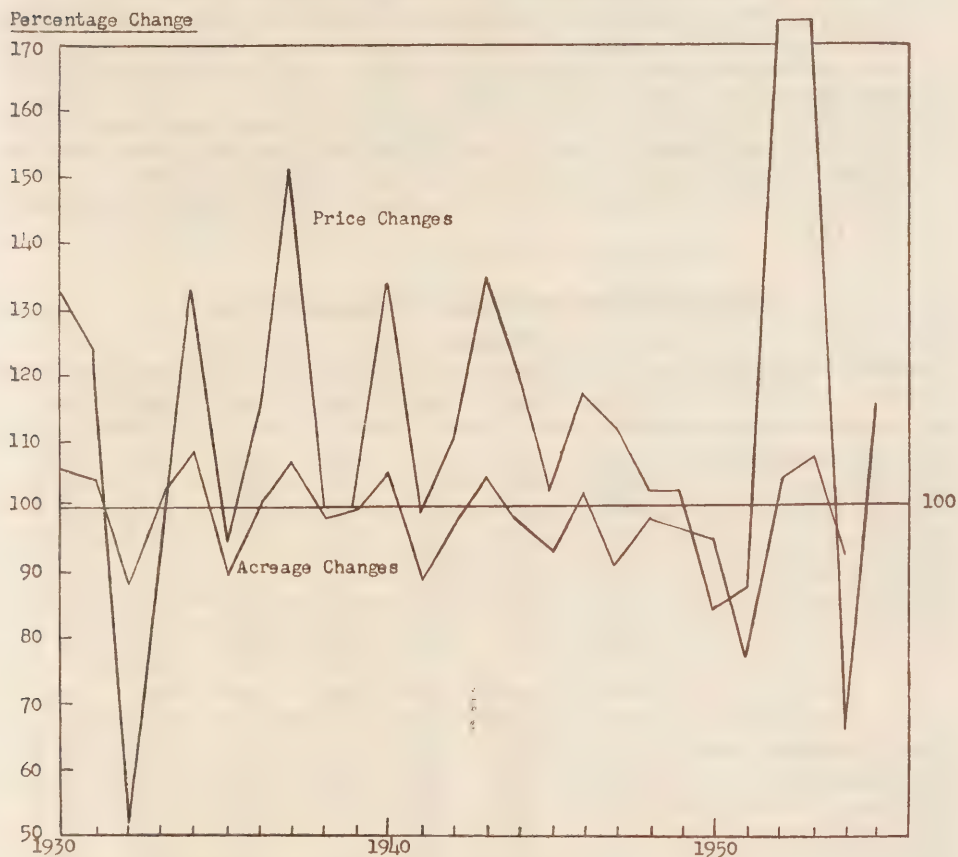
Acreage of Potatoes in Canada			Farm Price of Potatoes—Per Bushel		
Crop Year Beginning	Actual (000 omitted)	Percent of Previous Year		Percent of Previous Year, One Year	Average, Two Previous Years
1927	.....	.....	\$0.70	.....	.....
1928	.....	.....	0.49	70	.....
1929	544	.....	0.95	194	132
1930	571	105	0.50	53	123
1931	592	104	0.26	52	52
1932	522	88	0.38	146	99
1933	528	101	0.46	121	133
1934	569	108	0.30	65	93
1935	507	89	0.48	160	112
1936	502	99	0.68	142	151
1937	531	106	0.38	56	99
1938	522	98	0.55	145	100
1939	518	99	0.68	124	134
1940	545	105	0.50	74	99
1941	479	88	0.74	148	111
1942	467	97	0.90	122	135
1943	484	104	1.07	119	120
1944	471	97	0.92	86	102
1945	439	93	1.36	148	117
1946	446	102	1.03	76	112
1947	408	91	1.32	128	102
1948	401	98	1.00	76	102
1949	389	97	0.93	93	84
1950	370	95	0.77	83	88
1951	285	77	2.03	264	173
1952	297	104	1.68	83	173
1953	321	108	0.78	46	65
1954	296	92	1.42	182	114

SOURCE: Canadian Federation of Agriculture.

In this Table are given the calculations used by the witness to show the percentage changes in potato acreage for Canada for each year, related to the percentage changes in potato prices for the average of the two preceding years. The two percentage-change figures are plotted in Chart No. 1:

CHART No. 1

Percentage Changes in Canadian Acreage of Potatoes Related to Average Percentage Changes in Price For Two Years Previous to Seeding.



SOURCE: Canadian Federation of Agriculture.

It will be noted that changes in price from year to year vary greatly as compared with changes in acreage. It will also be noted that there is a marked degree of correspondence in the movement of the two lines in the Chart. They tend to rise and fall together; only three times in twenty-three years did they not move in the same direction in the same year.

The size of the Canadian potato crop prior to and during the First War was not significantly different from what it has been in the past ten years (see Table No. III). From 1918 to 1922 there was a substantial increase in acreage and production. There has been a downward trend since 1922, continuing unevenly to the present time. This movement was halted temporarily from 1948 to 1950, when Canadian potato production received an impetus from the United States price-support program.

The six following paragraphs incorporate evidence submitted by the Canadian Federation of Agriculture. (Evidence: pages 91c to 111):

Acreage of potatoes in Canada rose sharply toward the end of World War I, remained high for a few years after the war and then fell to a level a little above pre-war by 1925. A very slow reduction occurred from 1928 to 1940; since then, the decline has been more rapid.

Potato acreage for the Provinces of Ontario, Quebec and Nova Scotia shows the same general trend as that for Canada. There has been no downward trend in acreage in the past twenty-five years in either Prince Edward Island or New Brunswick. A moderate rise took place during the last war but acreage is now running at about the pre-war level. In the Prairie Provinces, acreage was relatively stable from 1930 to 1940, but a sharp falling off has taken place since 1940, particularly in Saskatchewan. Potato acreage in British Columbia has been more stable over the long term than in any other province, except Prince Edward Island and New Brunswick; even in British Columbia there has been a considerable decline since 1940.

Yield per Acre: Yield per acre in Canada has varied widely (see Table No. VI):

Table No. VI—Yields* of Potatoes, by Provinces, 1930 to 1955

(Bushels)

	1930	1931	1932	1933	1934	1935	1936
Prince Edward Island.....	175.0	151.7	141.7	166.7	200.0	153.3	196.7
Nova Scotia.....	178.3	143.2	171.7	151.7	186.7	168.8	158.3
New Brunswick.....	203.2	175.0	133.3	191.7	213.3	165.0	210.0
Quebec.....	135.7	192.7	144.3	168.3	165.5	147.7	156.7
Ontario.....	115.0	117.2	101.7	107.0	120.0	88.0	106.7
Manitoba.....	139.7	123.3	98.3	105.0	91.7	125.7	50.0
Saskatchewan.....	114.5	94.0	111.7	83.3	46.5	118.8	59.2
Alberta.....	140.0	128.3	113.3	96.7	93.3	106.7	101.7
British Columbia.....	160.2	178.0	198.3	160.0	193.3	178.3	186.7
CANADA.....	140.7	147.3	126.0	135.0	140.8	127.2	131.5
	1937	1938	1939	1940	1941**	1942	1943
Prince Edward Island.....	161.7	186.7	200.0	180.0	133.3	220.0	136.7
Nova Scotia.....	143.3	120.0	158.3	168.3	170.0	200.0	100.0
New Brunswick.....	191.7	133.3	165.0	211.7	200.0	225.0	288.3
Quebec.....	145.0	118.7	129.5	146.0	125.0	115.0	111.7
Ontario.....	111.7	85.0	85.0	76.7	105.0	97.8	108.3
Manitoba.....	133.3	100.0	93.3	86.7	150.0	136.7	141.7
Saskatchewan.....	45.0	103.3	60.0	86.7	91.7	148.3	103.3
Alberta.....	150.0	123.3	80.0	121.7	103.3	158.3	115.0
British Columbia.....	201.7	160.0	170.0	203.3	160.0	166.7	191.7
CANADA.....	133.5	115.0	116.7	130.0	128.7	141.6	137.5
	1944	1945	1946	1947	1948	1949	1950
Prince Edward Island.....	201.7	178.3	196.7	225.0	218.3	275.0	255.0
Nova Scotia.....	205.0	141.7	196.7	141.7	220.0	228.3	240.0
New Brunswick.....	258.3	170.0	233.3	236.7	255.0	306.7	286.0
Quebec.....	148.3	96.7	125.0	118.3	161.2	133.3	163.0
Ontario.....	118.3	110.0	150.0	133.3	176.7	160.0	192.0
Manitoba.....	83.3	100.0	90.0	123.3	136.7	113.3	142.0
Saskatchewan.....	90.0	61.7	80.0	106.7	105.0	78.3	103.0
Alberta.....	125.0	100.0	130.0	133.0	148.3	96.7	150.0
British Columbia.....	186.7	165.0	211.7	208.3	213.3	230.0	233.0
CANADA.....	156.4	121.0	156.1	155.2	184.6	181.8	197.6

Table No. VI—Yields* of Potatoes, by Provinces, 1930 to 1955—Concluded**(Bushels)**

	1951	1952***	1953	1954	1955 ¹
Prince Edward Island.....	200.0	300.0	273.0	248.0	253.0
Nova Scotia.....	180.0	230.0	231.0	221.0	220.0
New Brunswick.....	250.0	257.0	289.0	222.0	266.0
Quebec.....	138.5	150.0	166.0	126.0	114.0
Ontario.....	176.0	201.0	188.6	168.0	166.0
Manitoba.....	142.0	159.0	170.0	105.0	105.0
Saskatchewan.....	122.5	131.0	131.0	95.0	112.0
Alberta.....	133.0	195.0	179.0	123.0	164.0
British Columbia.....	200.0	260.0	300.0	282.0	290.0
CANADA.....	169.7	202.4	208.7	170.5	177.4

* Average Yield Per Seeded Acre

** Revised Estimates 1941-1951

*** Current Estimates 1952-1954

¹ Crop Estimate August 30, 1955.

SOURCE: Canada: Department of Agriculture; Dominion Bureau of Statistics.

There was no significant trend either way before 1940, except that the 1920's were moderately higher on the average than the 1930's. After 1940, and more or less coincident with the decline in acreage, yields began to improve. The better yields associated with the period following 1940 are variously ascribed to more liberal use of fertilizer, better control over disease and insects, and better cultural practices. Rainfall is an important factor in producing good yields in non-irrigated lands, and there is not much doubt that prices affect yields to the degree that good prices enable the grower to apply more commercial fertilizer. There appears to have been a certain amount of shifting of potato acreage from low to higher-yielding areas, as well as some concentration within the areas where production is intensive and highly specialized. (The Board believes that this tendency is, however, markedly less than in the United States.)

There was no significant trend in potato yields per acre in New Brunswick or Prince Edward Island from 1908 to 1940. From 1940 to date, there has been a persistent upward trend in yields. Normal per-acre yield, in these provinces, now runs about 250 bushels as compared with 170 bushels, 15 years ago. There has been a strong tendency for these yields to run in cycles, most of the peaks coming two or three years apart.

Ontario and Quebec show an upward trend in yield since 1940, varying from about 180 to 200 bushels, as compared with about 100 bushels, 15 years ago. Yield cycles are also clearly evident in these two provinces.

In Manitoba and Saskatchewan there was a downward trend in yield from 1910 until the middle 1930's, and even now yields are not any higher than in the 1920's. Alberta shows an upward trend since the middle 1930's, and in British Columbia the movement has been upward since about 1945.

Net Supply v. Population Growth:

Total supply of potatoes, as distinct from total human consumption, is calculated by adding imports to production. From the resulting figures, exports are deducted to give net supply. For significant statistics, see Table No. VII and Chart No. 2:

Table No. VII—Crop Years: Canadian Potato Production, Imports, Exports and Net Supply per Capita

	Production	Imports	Exports	Net Supply	Population	Net Supply Per Capita
	(000 bus.)	(000 bus.)	(000 bus.)	(000 bus.)	(000)	(bus.)
1929-30.....	66,550	667	4,577	62,640	10,029	6.2
1930-31.....	80,402	335	7,958	72,779	10,208	7.1
1931-32.....	87,175	190	3,418	83,947	10,376	8.1
1932-33.....	65,693	179	1,325	64,547	10,510	6.1
1933-34.....	71,242	207	2,740	68,709	10,633	6.5
1934-35.....	80,158	174	1,445	78,887	10,741	7.3
1935-36.....	64,450	217	1,555	63,112	10,845	5.8
1936-37.....	66,023	247	1,344	64,926	10,950	5.9
1937-38.....	70,912	276	3,074	68,114	11,045	6.2
1938-39.....	59,897	986	2,290	58,593	11,152	5.3
1939-40.....	60,650	904	3,507	58,047	11,267	5.2
1940-41.....	70,500	681	2,407	68,774	11,381	6.0
1941-42.....	61,731	657	2,120	60,268	11,507	5.2
1942-43.....	66,183	1,062	1,894	65,351	11,654	5.6
1943-44.....	66,580	390	2,535	64,435	11,795	5.5
1944-45.....	73,644	715	10,550	63,809	11,946	5.3
1945-46.....	53,116	7,987	3,310	57,793	12,072	4.8
1946-47.....	69,594	664	10,597	59,661	12,292	4.9
1947-48.....	63,360	359	6,729	56,990	12,551	4.5
1948-49.....	73,993	515	11,371	63,137	12,823	4.9
1949-50.....	70,800	1,519	11,889	60,430	13,447	4.5
1950-51.....	73,041	949	7,453	66,537	13,712	4.9
1951-52.....	48,361	3,781	2,675	49,467	14,009	3.5
1952-53.....	60,071	2,248	4,352	57,967	14,430	4.0
1953-54.....	67,002	1,959	5,522	63,439	14,781	4.3
1954-55.....	50,326 ¹	3,530 ²	2,800 ³	51,056	15,195	3.4

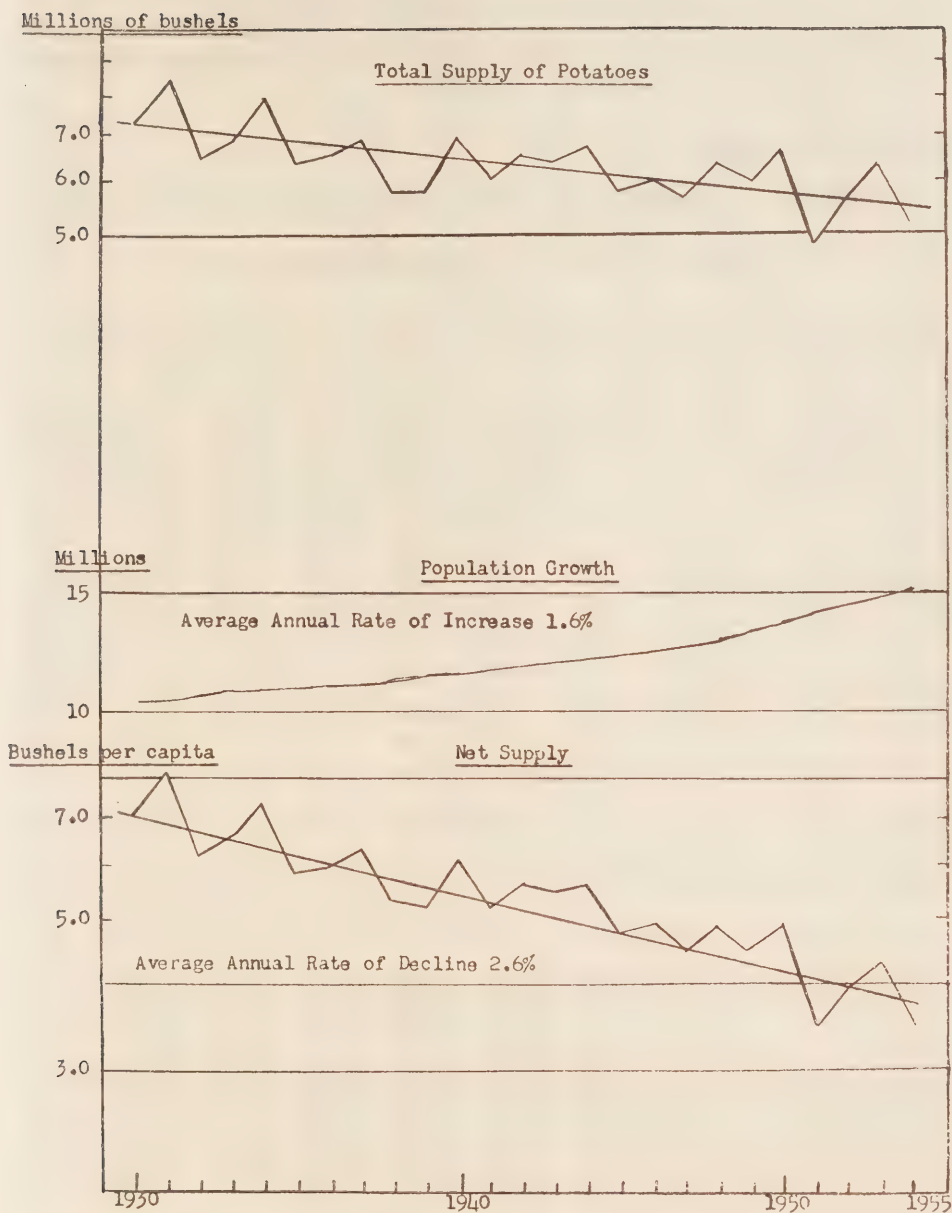
¹February 1955 estimate.

²August 1, 1954 to March 31, 1955, 2,530,000 bushels. April 1 to July 31, 1,000,000, estimate.

³August 1, 1954 to April 30, 1955, 2,584,000 bushels. May 1 to July 31, 216,000, estimate.

SOURCE: Canadian Federation of Agriculture.

CHART No. 2



SOURCE: Canadian Federation of Agriculture.

Over the past twenty-three years, the total supply of potatoes has been moving downward at an average compound rate of about 1.2 per cent per year. Net supply per capita has had a downward trend at the average compound rate of 2.6 per cent per year. Population, on the other hand, has increased at a compound rate of 1.6 per cent per year.

“As the forces which have contributed to a decline in the per capita use for potatoes will likely continue to operate”, stated Dr. E. C. Hope, “I would suspect that the gradual decline in the total Canadian market will continue. If the current rate of population-increase should slow down, this would certainly be the case” (Evidence: page 123).

In the United States:

Production of potatoes in the United States is given in Table No. VIII:

Table No. VIII—United States Potato Production 1930-1955

(000 Bushels)

	1930	1931	1932	1933	1934	1935	1936
Maine.....	44,750	47,988	40,460	42,000	55,404	38,880	45,885
New York.....		30,997	33,075	29,274	38,467	27,830	26,400
Pennsylvania.....		28,620	23,650	23,843	32,770	25,536	25,212
Michigan.....		24,564	30,264	23,325	36,176	28,101	26,125
Wisconsin.....		26,319	24,621	18,620	31,968	23,534	20,090
Minnesota.....		28,880	29,562	22,035	20,463	29,400	12,502
North Dakota.....		9,028	9,686	9,548	6,210	13,230	6,105
Colorado.....		10,070	12,650	14,700	7,812	18,000	18,500
Idaho.....		25,520	22,800	25,530	23,932	22,360	22,260
Ohio.....		12,240	13,464	10,008	14,700	16,524	14,430
Total Late.....		308,339	313,424	286,931	337,175	318,887	274,195
New Jersey.....		7,434	6,900	6,840	8,320	8,632	8,840
Virginia.....		13,786	9,579	8,740	13,493	11,340	7,380
Total Intermed.....		36,384	34,724	26,818	32,279	34,992	25,897
Total Early.....		39,402	28,277	28,557	36,651	33,799	31,826
Total U.S.A.....	340,572	384,125	376,425	342,306	406,105	387,678	331,918
	1937	1938	1939	1940	1941	1942	1943
Maine.....	48,503	39,600	37,260	41,762	43,035	42,660	73,485
New York.....	28,375	26,840	26,797	28,457	27,676	27,676	29,678
Pennsylvania.....	25,215	22,002	22,440	21,000	21,450	17,584	18,656
Michigan.....	28,634	30,000	24,250	17,548	20,020	16,562	22,365
Wisconsin.....	18,525	19,080	17,336	13,246	14,378	10,050	16,368
Minnesota.....	24,411	20,700	20,315	23,750	16,068	18,050	23,571
North Dakota.....	11,970	12,070	14,025	18,630	15,015	17,955	22,100
Colorado.....	15,588	11,830	14,400	13,936	12,529	17,020	18,705
Idaho.....	29,520	28,750	28,520	33,280	27,450	30,590	43,470
Ohio.....	10,030	12,626	12,600	9,476	10,614	9,180	8,550
Total Late.....	310,170	287,786	288,956	295,547	278,746	286,099	363,543
New Jersey.....	10,080	10,530	7,480	10,285	10,340	10,136	11,431
Virginia.....	10,920	10,349	6,786	10,286	6,808	7,242	9,594
Total Intermed.....	36,509	37,923	27,617	33,572	29,658	31,165	34,774
Total Early.....	46,710	45,908	46,586	48,984	47,198	53,225	66,339
Total U.S.A.....	393,389	371,617	363,159	378,103	355,602	370,489	464,656

Table No. VIII—United States Potato Production, 1930-1955
(000 Bushels)—Concluded

	1944	1945	1946	1947	1948	1949	1950
Maine.....	52,260	54,549	77,745	64,400	74,305	70,215	63,360
New York.....	26,445	30,440	42,570	33,090	38,035	30,660	34,390
Pennsylvania.....	19,140	16,577	20,066	17,985	19,425	19,158	19,920
Michigan.....	19,548	18,040	18,327	12,390	16,350	17,160	15,300
Wisconsin.....	11,844	12,160	11,865	10,080	13,050	13,600	13,400
Minnesota.....	15,334	19,140	16,610	16,940	17,280	17,000	16,275
North Dakota.....	20,875	23,460	17,760	20,480	20,000	21,645	21,280
Colorado.....	20,025	17,745	19,780	18,500	21,450	18,810	18,200
Idaho.....	39,100	45,000	41,160	28,600	45,000	36,000	49,200
Ohio.....	5,810	7,021	7,560	5,460	6,765	6,270	7,650
Total Late.....	301,372	322,999	357,389	295,829	353,012	323,772	338,659
New Jersey.....	8,804	12,567	14,076	13,514	13,629	8,554	12,502
Virginia.....	5,976	8,772	10,676	9,450	11,529	9,126	7,964
Total Intermed.....	24,037	32,855	38,270	33,801	36,306	27,301	29,204
Total Early.....	57,725	62,166	80,310	59,418	65,336	60,492	62,033
Total U.S.A.....	383,134	418,020	475,969	389,048	454,654	411,565	429,896

	1951	1952	1953	1954	1955 ¹
Maine.....	44,500	54,360	59,625	49,725	69,750
New York.....	27,900	30,725	30,860	30,935	29,550
Pennsylvania.....	16,215	14,400	13,020	14,210	13,680
Michigan.....	10,800	10,360	10,730	9,555	9,446
Wisconsin.....	9,805	12,040	14,335	11,610	11,265
Minnesota.....	11,900	12,240	12,480	16,000	15,596
North Dakota.....	13,320	14,400	17,340	18,620	17,150
Colorado.....	12,240	19,250	19,095	17,280	18,585
Idaho.....	36,680	42,780	46,500	42,075	49,225
Ohio.....	5,750	4,800	4,800	5,750	5,980
Total Late.....	250,925	282,591	296,879	287,453	313,527
New Jersey.....	7,476	4,866	6,519	5,784	6,982
Virginia.....	6,882	4,692	6,300	4,789	6,369
Total Intermed.....	20,424	14,059	17,641	15,715	20,314
Total Early.....	49,170	52,440	65,555	51,931	58,698
Total U.S.A.....	320,519	349,098	380,075	355,099	392,539

¹—Crop Estimate: United States Department of Agriculture—September 10, 1955.

SOURCE: Canada: Department of Agriculture.

Potatoes are grown in every state of the Union. As in Canada, they are the largest vegetable crop and provide the major part of farmers' cash income from the sale of vegetables. As with the Canadian industry, the long-term trend of production has been down, consumption is declining (but at a less rapid rate than in Canada), and acreage seeded to potatoes is decreasing.

Since 1930, total production of potatoes in the United States has varied widely but showed no particular trend until after the beginning of World War II. From 1943 onwards, production increased rapidly owing to wartime demand and to higher prices resulting from price supports. Throughout the war and early post-war years, United States potato crops remained unusually large, but declined sharply in 1951 following the removal of price supports. Average yearly production since 1951 has been 351,198,000 bushels, a drop of nearly 20 per cent from the support-price era average of 428,367,000 bushels, but not greatly lower than the average crops which were produced between the wars.

Acreage and yields, like production, have varied considerably but again showed no very definite trend prior to the mid-thirties. Since 1935, acreage has declined sharply—however, increasing yields have offset the decrease in anticipated production, which, as noted above, has been relatively stable except for the war years.

“This changing pattern of acreage and yield reflects a shift toward more specialization in production of this crop. Acreage has continually shifted from low to high yielding areas and new varieties and cultural practices have come into use, all of which have contributed to rising yields per acre.” (Technical Bulletin 1105—U.S.D.A.)

Three-Crop Pattern:

In the United States, potatoes are harvested in every month of the year. In fact, the United States has three distinct crops:

(1) Late potatoes, which represent 81 per cent of total production. This is the crop which is concentrated in the States of Maine, Idaho, New York, Pennsylvania, Michigan, Minnesota, Wisconsin, North Dakota and the State of Colorado. The harvesting period is largely in September and October.

(2) Intermediate-crop potatoes, representing only about $4\frac{1}{2}$ per cent of total United States production, are grown chiefly in New Jersey, Virginia, Maryland and Kansas. These are harvested mainly from May to October.

(3) Early-crop potatoes, the ones well-known to Canadian consumers, because they normally represent the greater part of our purchases of United States potatoes. California is the chief supplier of early potatoes so far as Canada is concerned, but all the Atlantic States from North Carolina southward, including the Gulf States, are in the early potato belt. Early-crop potatoes supply about $14\frac{1}{2}$ per cent of total production. The harvest period extends from December to June.

Apart from those differences in respect of the crops, which result largely from differences in climate, the United States potato-growing industry varies from ours in other important ways: It probably could be said that United States commercial potato growers, and especially those in the nearby late-potato belt:

- (i) achieve greater yields per acre;
- (ii) accomplish those yields with less labor because of greater mechanization;
- (iii) have concentrated their potato acreage into relatively fewer and larger farms; and
- (iv) in consequence, grow potatoes at a lower cost per bushel than do Canadians.

The fact that in a considerable area of the United States potato growing is neither important nor particularly efficient would not affect the general applicability of the above statement.

Modern Production Techniques:

The surprising extent to which mass (or even assembly-line) production of agricultural products on this continent has superseded older and earlier methods is becoming a matter of general knowledge. These modern techniques of mechanized farming are now being applied to the planting and harvesting of a growing range of products, and potatoes are no exception to the rule. Coincident with development of modern machinery is the trend toward cultivation of crop-areas large enough to support the cost of such machines. In the United States, and perhaps merely to a lesser extent as yet in Canada, the farm which produces a small quantity of many different agricultural commodities is making a

progressively smaller contribution to total production: these farms cannot easily compete, largely because their operation is too costly in terms of labor and machinery. It may well be that for any branch of agricultural industry to ignore this movement toward mechanization and concentration, or to fail to make adjustments to it, is to court increasing difficulties.

The Board has secured considerable evidence in support of the contention that there exists a direct relationship between concentration of acreage and production of potatoes. The United States Department of Agriculture's "Report on Potato Acreage, Production and Yield, by Size of Farms" (Census of 1950) gives these data: For the United States as a whole, in 1949, .3 per cent of the farms in that country which grew more than 50 acres of potatoes each, produced 42 per cent of the total crop. Farms with 25-50 acres of potatoes, representing .5 per cent of all farms, grew 21 per cent of the total crop. *Less than one per cent* of the United States farms reporting potato production, therefore, grew almost two-thirds of the potato crop of that country in the year under review. At the other extreme, says the Report, 96 per cent of such farms had less than three acres each and together produced less than one-tenth of the total crop.

The United States Department of Agriculture attributes to this concentration of acreage, along with better cultural practices and the use of more suitable land, the resulting higher yields. High yields, in the main, are found on large-acreage farms; low yields on low-acreage farms (see Table No. IX):

Table No. IX—Farm Acreage Groups and Yield per Acre of 1949 Crop in Selected Potato-growing States along the United States-Canadian Border

Acreage Group	Maine	New York	Michigan	Wisconsin	Minnesota	North Dakota	Idaho	Washington	United States Total
Yield per acre in bushels									
0.1 - 0.9	146	118	112	98	90	84	177	148	102
1.0 - 1.9	168	104	95	74	67	53	188	149	82
2.0 - 2.9	324	143	110	80	75	53	247	204	110
3.0 - 9.9	385	227	156	133	111	127	252	309	187
10.0 - 24.9	426	282	190	185	166	191	245	396	259
25.0 - 49.9	468	261	201	279	176	174	246	369	285
50.0 - plus	488	272	236	317	201	186	245	412	289

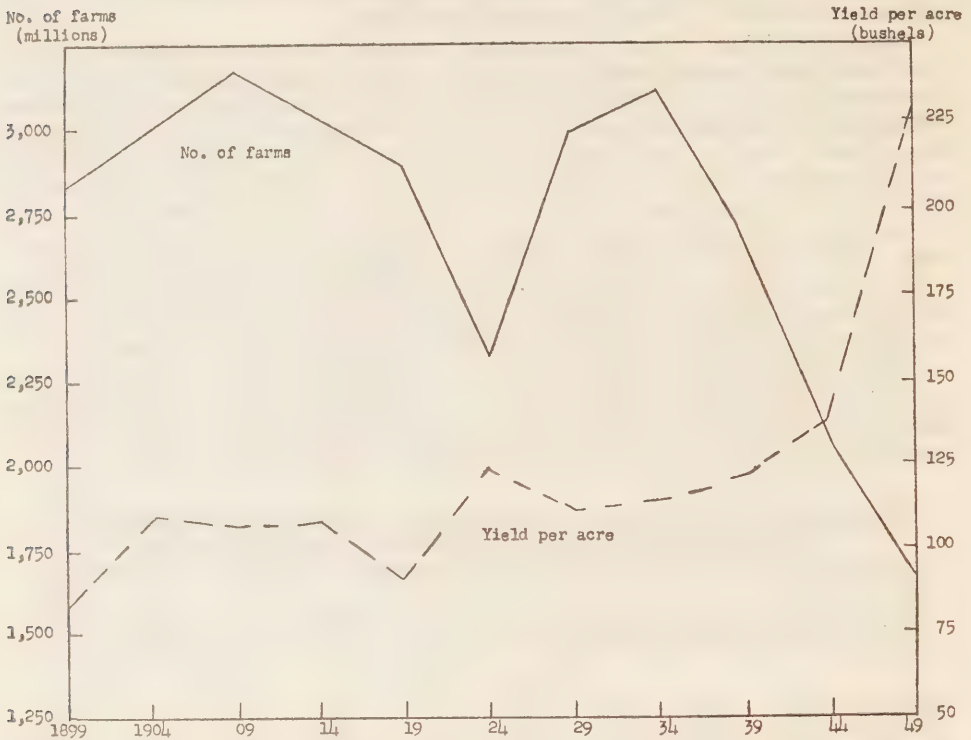
SOURCE: United States Department of Agriculture Report on Potato Acreage, Production and Yield by size of Farms (Census of 1950).

The concentration of United States potato growing among fewer farms in specialized areas during the 15-year period, 1934 to 1949, was coincident with a startling increase in yield per acre. In 1934, it required over three million farms to produce 406,105,000 bushels, yielding on the average 113 bushels per acre. By 1949, about half that number of farms grew 411,565,000 bushels, yielding well over 200 bushels per acre (see Chart No. 3).

This development of concentrated potato production is a feature of the spectacular improvement in farm productivity which has occurred over the past quarter-century in the United States. To quote from the magazine "Fortune" (June, 1955): "Thanks to a fertile progressive technology, the average United States farm worker is 110 per cent more productive than he was twenty-five years ago, and so 37 per cent *fewer* farm workers, putting in *fewer* hours, are producing 54 per cent *more* than United States agriculture produced twenty-five years ago." Some idea of the progress in potato production may be gained from a further statement in the same magazine to the effect that, whereas the man-hours required to produce 100 bushels of potatoes in 1930 numbered 63, today only 27 man-hours are needed—and that, as a *national* average for all farms.

CHART No. 3

Number of United States Farms Growing Potatoes and Yield Per Acre 1899-1949



Source: U.S.D.A.—Potatoes—Summary of 1950 Census data on acreage, production, and yield, by size of farms.

Impact of Industrialization on Canada:

The impact of this "industrialization" of the United States farm, and particularly of the potato farm, on the competing Canadian industry is bound to be severe. It is difficult to contemplate that wide differences in relative efficiency as between contiguous border areas can indefinitely be maintained. Sooner or later the higher-cost area must either compete, or collapse—other things being equal.

It was repeatedly stated by witnesses at the public hearings that the United States potato industry, and especially that portion of it which competes most directly with the Canadian, has a decided advantage in efficiency. The British Columbia growers, for instance, contended that their Washington State competitors produced $5\frac{1}{2}$ more tons of marketable grades per acre, at a cost \$66.25 per acre lower than in the Fraser Valley. It was represented further that the Washington State growers enjoy lower transportation costs to Vancouver where comparable distances are involved. Prince Edward Island representatives, complaining about competition from United States potatoes, said: "Potatoes are harvested every month of the year in some part of the United States. In that country, modern farm practices are responsible for large commercial growing operations which have tended to drive small farmers out of the potato business. The 1950 United States Census indicated that out of 1,649,906 farms reporting potato production, 63,404 commercial farms

produced 91 per cent of the crop. This development has greatly increased acreage yields... Introduction of more efficient production methods associated with mass production practices, including irrigation and the more effective use of insecticides and fungicides, has assisted in substantial yield increases."

The Board has found little evidence of a comparable development on a similar scale in this country—as yet. It is undoubtedly true that every growing area in Canada has some large-scale efficient producers well able to compete with their United States counterparts. This, the available evidence suggests, is the exception rather than the rule. Notwithstanding the existence of a growing number of specialists, potato growing in Canada is still largely carried on by general farmers. "Potato growing in Canada", said the Canadian Horticultural Council, in its Brief at the hearing, "is an integral part of a well-balanced farm program and the total acreage is divided among a large number of farm operators. There has been little change in this pattern from year to year". This may suggest that, in other words, the situation in Canada today is much like the one which prevailed in the United States before concentration of acreage and modern cultural practices were as widely adopted in that country as they have been.

**Table No. X—Comparative Yields of Potatoes
Canada and United States, 1930-1955**

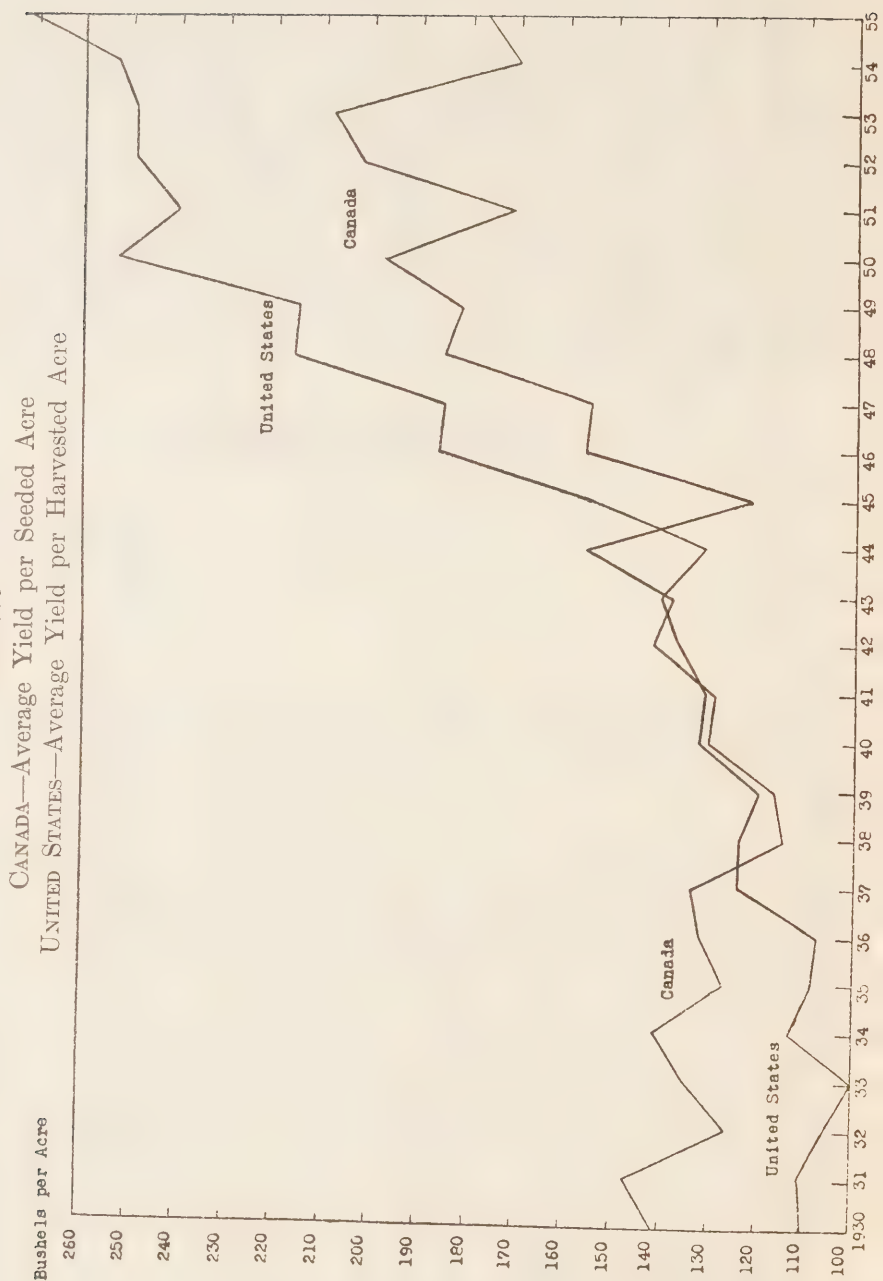
Year	CANADA	UNITED STATES
	Average Yield per Seeded Acre	Yield per Harvested Acre
	Bu.	Bu.
1930.....	140.7	109.8
1931.....	147.3	110.8
1932.....	126.0	105.9
1933.....	135.0	100.3
1934.....	140.8	112.9
1935.....	127.2	109.1
1936.....	131.5	108.4
1937.....	133.5	124.2
1938.....	115.0	123.8
1939.....	116.7	120.3
1940.....	130.0	132.0
1941.....	*128.7	131.2
1942.....	141.6	116.9
1943.....	137.5	139.5
1944.....	116.4	131.1
1945.....	121.0	155.0
1946.....	116.1	116.3
1947.....	155.2	185.2
1948.....	184.6	215.5
1949.....	181.8	215.2
1950.....	197.6	253.4
1951.....	169.7	240.3
1952.....	**202.4	249.0
1953.....	208.7	249.3
1954.....	169.9	252.8
1955.....	177.4 ¹	271.9 ²

* Revised Estimates 1941-1951
 ** Current Estimates 1952-1954

¹ Dominion Bureau of Statistics Crop Estimate August 30, 1955.
² United States Department of Agriculture Crop Estimate September 10, 1955.

SOURCE: Canada: Department of Agriculture.
 Dominion Bureau of Statistics.

CHART No. 4
COMPARATIVE YIELDS OF POTATOES—CANADA AND UNITED STATES
1930-1955



Disparities in Yield:

While yield per acre is not an infallible guide to efficiency in potato production, it is nevertheless a good yardstick for measuring the relative efficiency of two or more growing areas having roughly comparable conditions of soils and climate.

A comparison of national averages (see Table No. X and Chart No. 4, above) indicates quite clearly that from 1930 to 1937 Canadian yields of potatoes were appreciably higher than in the United States, and that from 1939 to 1943 they were almost the same. In 1945, because production in the United States was shifting to the high-yielding areas, and since the trend toward specialization by large growers was well under way, yields per acre rose dramatically, from 131.1 bushels per acre in 1944 to 253.4 bushels per acre in 1950. No doubt this more intensive cultivation was made economically possible and desirable by the bonanza given to growers during this period in the form of high government supports. In any event, having reached this high point in yield, the United States growers are apparently determined to hold it. In 1954, the yield remained at 252.8 bushels per acre, and is estimated at 271.9 bushels for 1955.

While Canada's yield per acre has been moving moderately upward since 1938, the progress is less rapid and more irregular, "peaking" at two or three year intervals. The high point in Canadian yield per acre, 208.7 bushels, was reached in 1953, but fell sharply off in 1954, an unfavorable crop year.

It is difficult to escape the conclusion that, in terms of yield per acre, Canadians are on the average less efficient as potato growers than their American next-door neighbors.

Contiguous-Areas Picture:

This disparity is even more apparent when production performances in contiguous Canadian and United States potato-growing areas are set one against the other. Chart No. 5 very definitely establishes the relative superiority in yield per acre of the potato-growing states which touch on our border.

As illustrative of contiguous-area disparities, reference might here be made to the potato production of the two great potato-growing areas of Canada and the United States: New Brunswick and Maine, in the former of which lie the outstanding producing counties of Carleton and Victoria, and in the latter of which lies the internationally-famous potato county of Aroostook. What applies to these competitive county areas—located side by side within the drainage basin of the Saint John River—applies generally to the larger geographical divisions of which they are parts: two areas with identical conditions of soil and climate, yet showing statistically a wide difference in production results as measured in terms of yield per acre:

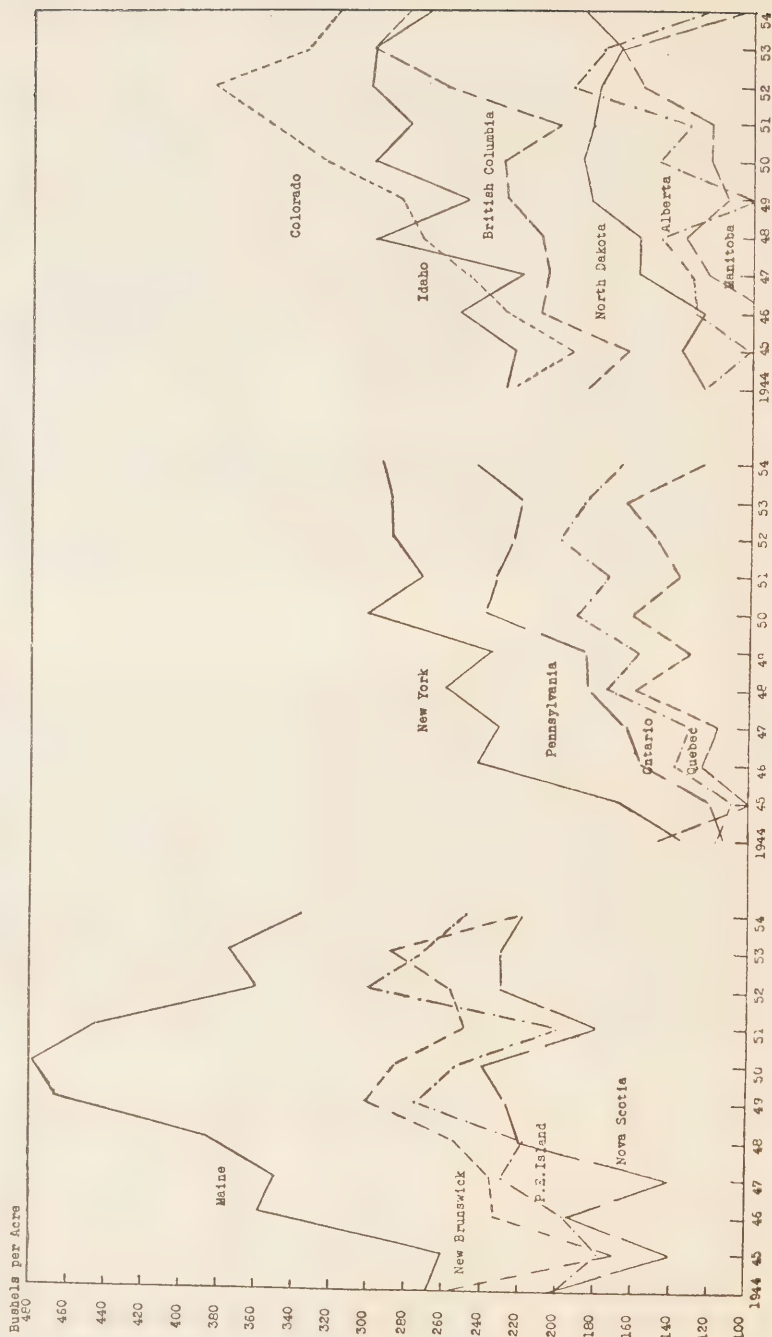
Yield per Acre in Bushels

	1950	1951	1952	1953	1954
Maine State.....	480	445	360	375	325
New Brunswick.....	286	250	257	289	222
Difference.....	194	195	103	86	103

The wide variations in yield between New Brunswick and Maine can in part be accounted for (a) by the difference in average size of farm potato acreage: 1.9 in New Brunswick as a whole (1951), 9.6 in Maine (1949); and (b) by the fact that 40 per cent of New Brunswick production is outside the

CHART No. 5

Yield per Acre by Selected Provinces with Comparative Yields for Contiguous and Neighboring States
1944-1954



specialized potato-growing area of Carleton and Victoria Counties, while only 10 per cent of Maine production is outside Aroostook County. There is no doubt that the existence of a high percentage of small potato-acreages of the non-commercial type, even within the two specialized counties, tends to reduce yields for those counties and for New Brunswick as a whole—and to a greater degree than applies in the State of Maine. While, in the following table, figures re yield refer to 1950 and those re acreage refer to 1951, the suggested relationship is interesting:

Table No. XI—Yield per Acre (1950) and Average Potato Acreage, New Brunswick Counties (1951)

County	Yield	Average No. Acres per Farm
Albert.....	170	0.7
Carleton.....	334	9.5
Charlotte.....	179	0.5
Gloucester.....	171	0.8
Kent.....	168	1.0
Kings.....	190	0.5
Medawaska.....	300	3.6
Northumberland.....	149	0.7
Queens.....	167	0.9
Restigouche.....	215	1.7
Saint John.....	201	0.9
Sunbury.....	240	1.1
Victoria.....	350	12.6
Westmorland.....	186	0.7
York.....	246	1.2
New Brunswick province.....	286	1.9

SOURCE: Dominion Bureau of Statistics, Census of Canada, 1951.

Only two New Brunswick counties, in 1950, came anywhere near the average yield for the entire State of Maine—Carleton and Victoria; and only these two counties are close in average acreage to that of the State of Maine. The 1951 Census shows that Victoria and Carleton Counties, with only nine per cent of the total number of farms reporting potatoes, together produced in 1950 nearly 70 per cent of the total production for the province, a result not inconsistent with what the Board has been able to learn about potato production in the United States wherever concentration occurs.

The latest nearly comparable and available figures of average seeded acreage per farm for Aroostook County and the two New Brunswick counties are these: Carleton, 9.5 (1951), Victoria, 12.6 (1951), and Aroostook, 33.8 (1949).*

“Aroostook County, Maine, is by all odds the area of most concentrated production in the United States. One half of the cropland harvested in this county is devoted to potatoes, which are grown on 90 per cent of the farms in the county and provide nearly 95 per cent of the agricultural income of the county. The predominant soil type upon which potatoes are grown in this county is the famous Caribou loam which produces heavy yields partly because large amounts of fertilizer are used. The growing season is short (100 days) and the growing season climate is cool and moist. Conditions for growing potatoes are ideal, while at the same time no other crop yielding comparable returns can be grown successfully. It can be said without exaggeration that

* A survey conducted in 1950 by the University of Maine Agricultural Experiment Station (Bulletin No. 485) shows that in the year 1949, of a sample of 388 potato farms in Aroostook County, 17.2 per cent had under 16 acres of potatoes; 30.4 per cent, 16.0 to 30.9 acres; 27 per cent, 31 to 50.9 acres; 13.6 per cent, 51 to 75.9 acres and 11.5 per cent, over 76 acres. For the county as a whole, the average was 33.8 acres.

here is strictly and completely a potato economy". (University of Minnesota Technical Bulletin 211, 1954—The Impact of Government Programs on the Potato Industry.)

While much of the above could be applied to parts of the Saint John River Valley potato area of New Brunswick, only that small district in the immediate vicinity of Grand Falls could by any standards qualify as "completely a potato economy". However, from what information is available, it seems likely that while in many respects Aroostook County and the Saint John River Valley as a whole are widely separated in production results, farms with comparable acreage and cultural practices do not vary greatly, if at all, in efficiency. It has been observed (Table XI) that Carleton and Madawaska Counties, with average acreages of 9.5 and 3.6, produced 334 bushels and 300 bushels per acre, respectively—less than, but not too greatly different from, yields produced on farms of the same size in Maine. Growers in the Grand Falls district admit, and the Board concurs, that *for similar-sized, large-scale operations*, there is little difference between yields attained or costs per bushel on the two sides of the Maine-New Brunswick border.

Size and Intensity as Criteria:

The Board is of opinion that the two most important factors responsible for the difference in efficiency as between these two potato areas is *the relative size and the intensity of operation*—which in turn could account for greater yields and, hence, lower costs per bushel.

As stated earlier in this Report, yield per acre as such is not necessarily the absolute measure of efficiency in potato growing, unless it gives rise to increased net returns to the grower. However, such studies as are available to the Board indicate fairly conclusively that the net return per acre or per bushel tends to increase as yield increases.

A cost of production survey was conducted on 115 farms in various regions of Ontario in 1949 by the Farm Economics Branch, Ontario Department of Agriculture. The results of the survey varied widely from farm to farm, but the investigators summarized their finding in this way: Using "*net earnings per acre*" as the criterion of success, the four important factors in attaining the same were: "(a) securing good yields, (b) applying adequate fertilizer, (c) keeping down the labor time required, and (d) doing all this on sufficient acres to be worthwhile."

Table No. XII following shows that in the investigators' words, "Net earnings per enterprise increased with yields. Cost per acre went up, but costs per bag were lowered as more bags per acre were produced". Of all factors affecting yield, only weather (unless there be irrigation) is uncontrollable. All cultural practices are the result of deliberate decisions of the operator, and these have considerable effect on yields and net earnings:

Table No. XII—Relation of Yield to Net Earnings (1949)

Grouped by Yield per Acre	Average Yield per Acre	Net Earnings per Enterprise	Cost per Acre	Cost per Bag
	(bags)	(£)	(£)	(£)
Less than 160 bags.....	130	Loss 4	136	1.05
160 to 199 bags.....	183	Gain 223	162	0.88
200 to 239 bags.....	215	Gain 470	175	0.81
240 to 279 bags.....	254	Gain 814	182	0.72
280 bags and over.....	337	Gain 867	229	0.68

SOURCE: Late Potato Production Costs: Farm Economics Branch, Ontario Department of Agriculture.

IMPORTS

Canada's potato imports consist almost entirely of table stock from the United States (see Table No. XXIV, Schedule G).

Imports of United States table potatoes have averaged 1,182,326 bushels annually (calendar years) over the past twenty-five years. Only in two years did imports exceed more than one per cent of United States potato production; and only in four years did they exceed five per cent of Canadian potato production. By far the greater percentage of imports comprises "early" potatoes, which, speaking generally, enter this country before Canadian new potatoes in appreciable volume are ready for market. With the exception of the Essex-Kent area of Southern Ontario and the delta region of British Columbia, Canadian climate permits the production of late potatoes only. Hence there appears to be a yearly demand for substantial quantities of these "new" potatoes in most Canadian markets.

Repeated reference at the public hearing to the relation between the state of the domestic industry and the annual volume of imports from the United States appeared to reflect, in the minds of those giving evidence, a high degree of pre-occupation with the fact that free entry of potatoes into Canada is permitted during all but a six-week period in each year. The Brief presented on behalf of the Horticultural Council, with the support of the Canadian Federation of Agriculture, said in this connection: "...under substantially free entry, United States had more than trebled its exports of table potatoes to Canada." It is of interest in this connection that, year by year, by far the greater volume of imported potatoes has entered this country during the three-month period of May-June-July, within which quarter falls the entire dutiable period of June 15 to July 31. It should be noted, however, that—disregarding certain abnormal movements during the war years—the tendency of late has been for imports to spread themselves over a somewhat longer period in each year than was the case in the early '30's. In each of the last four or five years, imports in the month of May have been assuming relatively greater proportions—perhaps not unnaturally, that being a month when the new crop of domestic production is still some weeks away. The following Table is informative:

**Table No. XIII—Quarterly Variations in Imports of United States Potatoes by *Crop Years
1930-31 to 1954-55**

(% of Total Imports)

	1st quarter	2nd quarter	3rd quarter	4th quarter
1930-31.....	1.8	0.8	8.9	88.5
1931-32.....	0.6	0.7	5.6	93.1
1932-33.....	0.2	0.2	6.3	93.3
1933-34.....	.....	0.6	6.4	93.0
1934-35.....	.....	0.4	3.6	96.0
1935-36.....	0.4	0.4	16.7	82.5
1936-37.....	0.2	0.7	5.6	93.5
1937-38.....	0.1	0.7	9.3	89.9
1938-39.....	.....	0.6	5.2	94.2
1939-40.....	6.2	5.3	22.2	66.3
1940-41.....	15.0	20.0	24.7	40.3
1941-42.....	1.3	4.7	8.2	85.8
1942-43.....	4.0	2.1	3.2	90.7
1943-44.....	10.8	0.6	60.6	28.0
1944-45.....	0.2	.....	.....	99.8
1945-46.....	1.0	38.0	43.9	17.1
1946-47.....	5.4	1.4	2.1	91.1
1947-48.....	5.5	0.1	0.2	94.2
1948-49.....	0.1	.....	0.3	99.6
1949-50.....	0.3	2.6	18.6	78.5
1950-51.....	9.5	4.3	9.5	76.7
1951-52.....	2.3	14.0	38.2	45.5
1952-53.....	4.0	4.1	14.0	77.9
1953-54.....	7.1	4.7	14.3	73.9
1954-55.....	15.8	23.4	21.3	39.5

*August 1st to July 31st.

It was contended at the public hearing that a form of severe competition had developed from a new (1955) regulation prohibiting the marketing in the United States of potatoes less than two inches in diameter. The evidence produced the information that this temporary regulation was put into effect during the period of surplus production in California, in order to cut down the quantity being offered for sale on the home market. It was explained that potatoes of one and seven-eighths inches diameter, unmarketable in the United States, could qualify for export to Canada. Potatoes of this size were, on the date of the Hearing—immediately prior to the seasonal-duty period—being offered on the Vancouver market “at reduced prices”. (Evidence: pages 90 and 91A).

EXPORTS

Table-stock exports are limited mainly to regions adjacent to the Canadian border and probably have had very little, if any, effect on prices throughout the United States as a whole. The quantity exported varies with the size and market price of the late-potato crop in the United States, but usually is not in excess of one-quarter of one per cent of United States production.

Until 1944, exports of Canadian table-stock potatoes were relatively small. In that year, 3.4 million bushels entered the United States as a result of abnormal wartime demand. Prior to that year, Canada's exports of table potatoes did not approach the tariff quota of one million bushels provided under the Trade Agreement of 1938 at the reduced rate of 37½ cents per cwt. Thereafter, the export of Canadian table-stock potatoes exceeded the tariff quota in each year until 1951, with the exception of 1946. After 1951, exports of table potatoes declined sharply, and only in 1953 did Canada nearly fill its tariff quota.

The exporting provinces of table potatoes are Prince Edward Island, New Brunswick and Nova Scotia, which in recent years have collectively supplied 98 per cent of Canada's total exports of table stock. Nova Scotia's share in this movement is small and consists mainly of reshipments of potatoes originating in Prince Edward Island.

Canadian exports to the United States of certified seed potatoes declined under the 75 cents per cwt. tariff in effect from 1931 to 1935, but rose steadily under the reduced rates effective under the 1935 and 1938 Trade Agreements. They reached a peak in the calendar year 1949, when over seven million bushels were shipped to the United States. Since then, Canada's export seed trade with the United States has declined. In 1952, it was down to 1.2 million bushels, the lowest export year since 1943. Export sales in 1954 were 1.7 million bushels, a figure well under the United States tariff quota of 2.5 million bushels. Sales of Canadian seed in the United States would represent five to six per cent of United States seed production.

Seed Exports Vital:

The export seed business is the cornerstone of the Prince Edward Island potato industry, and is of considerable though less importance to the Province of New Brunswick. Because of its soil and climate, and because it has specialized in the growing of this product, Prince Edward Island has produced a type of seed potato very much in demand, especially in the United States. Seed certification started in Canada in 1918, and growing seed potatoes to meet this standard has been an important industry in Prince Edward Island since that time. This province now produces about half of Canada's certified seed potatoes, 70 per cent of its total potato acreage being in foundation or certified seed.

The importance of the Prince Edward Island export trade in potatoes with the United States during the past five crop years is clearly shown in the following:

**Canadian and Prince Edward Island Exports of Potatoes to the United States—
Crop Years 1949-50 to 1953-54**

(SOURCE: Markets Information Service, Department of Agriculture)

		Table	Seed	Total
		bus.	bus.	bus.
1949-50.....	Canada.....	3,767,295	5,513,832	9,281,127
	Prince Edward Island.....	542,836	3,670,886	4,213,722
	Per cent.....	14.4	66.5	45.4
1950-51.....	Canada.....	1,867,969	2,959,938	4,827,907
	Prince Edward Island.....	536,192	2,380,896	2,917,088
	Per cent.....	28.7	80.4	60.4
1951-52.....	Canada.....	149,019	1,203,561	1,352,580
	Prince Edward Island.....	93,610	1,007,435	1,101,045
	Per cent.....	62.8	83.7	81.4
1952-53.....	Canada.....	952,235	1,806,248	2,758,483
	Prince Edward Island.....	748,784	1,539,324	2,288,108
	Per cent.....	78.6	85.2	82.9
1953-54.....	Canada.....	848,909	1,509,901	2,358,810
	Prince Edward Island.....	764,968	1,244,479	2,009,447
	Per cent.....	90.1	82.4	85.1

There is little doubt that Prince Edward Island owes its market for seed and table potatoes in the United States to the tariff quota. In fact, it would be difficult to overemphasize the importance of this concession to the economy of that Province. The twin advantages of the duty concession and water transportation to southerly markets are fundamentally important.

The Brief of the Canadian Horticultural Council drew attention to a United States Department of Agriculture regulation, which, it said, might restrict the export of Canadian table potatoes to the United States. Under the United States Agricultural Adjustment Act (1933) and the Agricultural Marketing Agreement Act (1937), potatoes of a size below the grade standard established for any potato marketing agreement in any of the States of the Union may not be imported into that country. Such a regulation was issued in March, 1955, effective on seven days' notice, providing that no imports of a size less than two and one-quarter inches in diameter were to be allowed. This was the standard specified in the marketing agreement in effect between the United States Department of Agriculture and the State of Maine and applied to 100-pound packages only. Canada No. 1 potatoes have a two-inch minimum (round varieties) and thus could not be exported in 100-pound packages, the usual export size. Fear was expressed by the Council that such regulations might be used by United States authorities to curb entry of Canadian potatoes into that market. This United States order was in effect for approximately two months, and its chief disadvantage was that it threatened to affect Canadian exports to Puerto Rico. From information the Board has been able to gather, it proved feasible to change to 75 and 50-pound packages, thus largely escaping the restrictive effect of the regulation.

In September, 1955, a still more restrictive order (known as the "Maine order") was announced by the United States Department of Agriculture. Under the provisions of this order or regulation, all round white or red varieties of potatoes shipped from Maine during the period September 19, 1955 to June 30, 1956, must meet a size requirement of 2½ inches minimum diameter and 4 inches maximum diameter—considerably above the (domestic) standard for Canada

No. 1, and above the standards of most, if not all, other states of the Union. When the order was published, it was intimated that its terms would apply to imports (i.e.—potatoes from Canada) at some date in October, 1955. At date of transmittal of this Report, it appeared that both countries might apply identical standards in November.

CONSUMPTION

One of the problems faced by the grower of potatoes is the shrinking public demand for the product of his toil: consumption per capita in Canada has been and is declining.

That truth having been stated, one must at once proceed to qualify and explain the statistical fact. The common formula, “production plus imports less exports equals consumption (or disappearance)” applies with perhaps less exactitude to potatoes than to some other food commodities, due to the greatly varying influence, from year to year, of such factors as waste, enforced salvage (by way of feeding to livestock), and actual destruction of unsold potatoes at the end of an unprofitable season. Apart from this aspect of the situation, it is equally true that such data as are available regarding per capita consumption in Canada and the United States cannot be regarded as completely infallible and must be accepted as being, at best, corroborative evidence of a state of affairs which, even were there no statistics thereon, has become a matter of general public knowledge.

Such statistics on the point as are available indicate clearly: (1) that per capita consumption in the United States has for decades been less than in Canada and (2) that a parallel trend in declining human consumption has been in evidence in both countries for a considerable time. In 1948, the United States Tariff Commission reported as follows: “According to the U.S. Department of Agriculture, per capita consumption of potatoes amounted to 150 pounds immediately after World War I, but dropped to 127 pounds by 1936, and is now running at about 118 pounds”. . . . “The annual production increased only slightly from 1920 through 1940 . . . because of the decline in per capita consumption, particularly in the large urban centres”. Statistics relative to the two countries are not strictly comparable, due in part to the fact that until 1940-41, the Canadian figures (Dominion Bureau of Statistics) of per capita consumption were on the basis of *crop* years, whereas those of the United States were by calendar years; since 1940-41, both are on the latter basis. Evidence offered at the public hearing by the Canadian Horticultural Council (based on data available from the Dominion Bureau of Statistics) covered a period of 25 years for both countries, and, from the table submitted, the following may be cited as illustrative of the trend:

Apparent Domestic Disappearance
(Per Capita)

Year	Canada	United States
	pounds	pounds
1930-31.....	254	130
1940-41.....	226	121
1950.....	178	101
1951.....	143	108
1952.....	147	101
1953.....	158	102

That human consumption of potatoes in the United States has been historically lower than that in Canada is not difficult to understand when one gives due weight to the differences in climate, degree of urbanization, and the

year-round availability in the former country of a wide variety of other fresh vegetables and of fruits. But the latter two of these factors have in recent years been operating more and more uniformly in the two countries; in Canada, accelerated industrialization, reflected in an increasing tempo of urbanization in the past decade, has "narrowed the gap" on that score; moreover, recent improvements in the transportation, storage and processing (particularly freezing) of fresh vegetables and fruits have more and more tended to make available to the consumers of both countries certain advantages which formerly had prevailed only in respect of one.

Even before the commencement of World War II, widespread propaganda as to the importance or non-importance, desirability or non-desirability, of the lowly potato as an item in the daily dietary had had an undoubted influence upon the eating habits of Canadians. It may be that this influence is still exerting itself. Even if not, other facts have injected themselves into the situation and are weighing heavily with the housewife; particularly perhaps, the growing popularity of salads which feature, virtually at all times of the year, a variety of fresh vegetables and fresh fruits—some or all of such at the expense, to some degree at least, of what used to be (and in many families still is) the basic vegetable component of the main meal of the day, the potato.

Whatever the cause, the fact that impresses itself upon anyone who studies the situation is that, year by year, Canadians are consuming, per capita, fewer potatoes—and this despite the growing popularity of certain forms of processed potato, such as "French-fries", potato chips, and the frozen-cooked product now featured in the frozen-foods sections of the modern supermarkets. This certain decline in per capita consumption bears a direct relation to the production situation, discussed earlier in this Report.

Whether or not the present downward trend in per capita consumption in Canada will be continued at anything approaching its present rate is a matter of speculation. There are no positive indications that the decline has run its course. Some of the more modern developments in the processing sections of the Industry may, if nothing more, arrest the downward movement. The apparent growth in popularity of such processed forms as the French-fried and "chip" potatoes above mentioned may have an influence on human consumption. Still more, in these days of vanishing domestic help and of increasing daily outside employment, whole or part time, of married women, such still more recent innovations as the frozen-cooked (or cooked-frozen) potatoes—which require only to be heated in a double-boiler—may have their own appeal for those housewives who lack either the inclination or the time, or both, to inflict upon themselves the time-honored but somewhat messy task of cleaning and peeling the product in its natural state.

MARKETING AND TRANSPORTATION

Potatoes are a heavy, bulky, perishable product having a low value in relation to their weight and consequently they normally incur transportation costs which are high in relation to their price.

Except from the Provinces of Prince Edward Island and New Brunswick, Canadian potatoes do not ordinarily travel far to market. Potatoes grown in Ontario and Quebec, for instance, are nearly all consumed in those Provinces. The same general rule applies in the four Western Provinces. Excluding a relatively minor movement in seed potatoes and "new" potatoes, it is probably accurate to say that most potatoes are grown within easy trucking or shipping distance of the markets where they will be consumed. There is, of course, a certain amount of seasonal interchange, mostly between neighboring provinces, but not one involving an important part of the production of any.

The Provinces of Prince Edward Island and New Brunswick, on the other hand, require for their own use only a small part of their potato production and must look for markets far beyond their borders. Those markets are found largely in Central Canada, the United States, the West Indies and South America.

The economy of the Maritime Provinces is characterized by a high degree of specialization in the production of a surplus of low-value primary products (of which potatoes are of particular importance). Hence, there is necessarily a great dependence on outside markets—and since these markets are at some considerable distance, relatively heavy transportation charges are involved.

In recent years, export markets for Maritime potatoes have decreased considerably, due chiefly to the loss of some of their United States markets. Exports, which were at 11,441,824 bushels for the three Provinces in the 1949-50 crop year, were down to 5,194,162 bushels in the 1953-54 crop year and had reached even lower levels in the intervening years. It was inevitable, in view of that development, that Maritime potato growers look to the Central Provinces as an outlet for an increasing part of their potato crop.

In the central Canadian market, however, Maritime potatoes must meet the competition of the local product, which bears much lower transportation costs in moving from farm to market, since, as pointed out elsewhere, the potato-producing areas of Central Canada are largely within easy trucking distance of the main markets.

The geographic disadvantage of distance has been intensified by a series of freight-rate increases beginning in 1948. The history of those increases follows.

Changes in Transportation Rates:

In common with a wide range of agricultural products in Canada, Maritime potatoes have borne a burden of steadily increasing freight rates. Table No. XIV below gives these changes, from selected points, expressed in cents per hundred pounds, from the base rate in effect on April 7, 1948, through the succession of rate variations up to the time of this inquiry. It will be observed from the table that the rail rates made effective on March 16, 1953, represented the peak in charges, thereafter reduced by competitive rates to meet motor truck competition in the case of New Brunswick; and by competitive rates, and later by agreed charges, to meet water and truck competition in the case of Prince Edward Island.

The net effect of all rate increases permitted by the Board of Transport Commissioners was to raise them by 89·67 per cent between April 7, 1948, and March 16, 1953, inclusive:

**Successive Rate Increases on Potatoes,
April, 1948, to March, 1953**

Effective Date of Increase		General Increase	Increase over April 7, 1948
		%	%
April 8, 1948.....		21	21·0
October 11, 1949.....		8 (Interim)	30·68
March 23, 1950.....		16 (Interim)	40·36
June 16, 1950.....		20 (Final)	45·2
July 26, 1951.....		12 (Interim)	62·62
February 11, 1952.....		12 (Continued)	62·62
January 1, 1953.....		9	77·26
March 16, 1953.....		7	89·67

(SOURCE: Maritime Transportation Commission Study, dated Sept. 25, 1953)

Table No. XIV—History of Rail Rates on Potatoes from typical Originating Points in Prince Edward Island and New Brunswick to Specified Destinations in Quebec and Ontario, indicating changes reflecting Various Freight Rate Increases from April 7, 1948 to July 18, 1955.

(Rates in cents per 100 lbs.—Carload minimum weights as per tariffs)

	April 7/48	April 8/48	Oct. 11/49	Mar. 23/50	June 16/50	July 26/51	Feb. 11/52	Jan. 1/53	Mar. 16/53	Sept. 21/53	Mar. 1/54
	Base	21% Int.	8% Int.	16% Int.	20% Int.	12% Int.	12% Cont.	9% Int.	7% Int.	Comp.	A.C. 75*
From: CHARLOTTETOWN, P.E.I.											
To:											
Montreal, P.Q.	30	36	39	42	43	48	48	52	56	50	50
Kingston, Ont.	34	41	44	49	55	55	55	60	64	57	57
Ottawa, Ont.	32	39	42	45	47	53	53	58	62	58	58
Toronto, Ont.	38	46	50	53	55	62	62	68	73	64	65
London, Ont.	43	52	56	60	62	69	69	75	80	75	76
Windsor, Ont.	46	56	60	65	67	75	75	82	88	78	79
From: SOURIS, P.E.I.											
Montreal, P.Q.	31	38	41	44	46	52	52	57	61	54	50
Kingston, Ont.	36	44	48	51	53	59	59	64	68	62	57
Ottawa, Ont.	34	41	44	48	49	55	55	60	64	60	58
Toronto, Ont.	39	47	51	55	56	63	63	69	74	66	65
London, Ont.	44	53	57	61	64	72	72	78	83	78	76
Windsor, Ont.	49	59	64	68	71	80	80	87	93	83	79
From: WOODSTOCK, N.B.											
Montreal, P.Q.	28	34	37	39	41	46	46	50	54	48	
Kingston, Ont.	33	40	43	46	48	54	54	59	63	56	
Ottawa, Ont.	31	38	41	44	46	52	52	57	61	57	
Toronto, Ont.	38	46	50	53	55	62	62	68	73	64	
London, Ont.	43	52	56	60	62	69	69	75	80	75	
Windsor, Ont.	46	56	60	65	67	75	75	82	88	78	

Explanation of Abbreviations:

A.C.—Agreed Charge
Int.—Interim Increase
Comp.—Competitive
Cont.—Continued—Board of Transport Commissioners Order dated Jan 25/52 held the increase on Potatoes to interim of 12% in the so-called 17% Case.

Tariff References: C.N. Rys. No. C.V. 25-1, C.T.C. No. E.3902
C.F.A. No. 71, C.T.C. No. 1427
C.F.A. No. 72, C.T.C. No. 1445
C.F.A. No. 72-A, C.T.C. No. 1450
C.F.A. No. 72-B, C.T.C. No. 1453
C.F.A. No. 74, C.T.C. No. 1405
C.F.A. No. 74-A, C.T.C. No. 1473
C.F.A. No. 74-B, C.T.C. No. 1486
C.F.A. No. 74-C, C.T.C. No. 1487
C.N. Rys. No. C.M. 300-15, C.T.C. No. E.4014
C.F.A. No. C.T.C. (A.C.) No. 75

Source: Maritime Transportation Commission, July 20, 1955.

The statement in the Brief of the Canadian Horticultural Council "... rail rates which a large number of Maritime growers are compelled to use and which have increased since 1948 by 89 per cent..." (Evidence—page 31), is valid only to September 21, 1953, to most of the principal consuming points in Quebec and Ontario, on which date motor truck and/or water competitive rates went into effect from both Prince Edward Island and New Brunswick. The result of this action lowered rail rates by some six to twelve per cent, but New Brunswick still had a small competitive advantage over Prince Edward Island as a whole in respect of freight rates to Central Canadian markets, since there was a differential in rates within Prince Edward Island between the two rate zones that exist in that province. Table No. XIV above shows variance in rates between Souris (Zone 1) and Charlottetown (Zone 2).

As a result of negotiations between the railways and interested Prince Edward Island parties which began in December, 1953, a proposal for an agreed charge was considered which had as its objectives—(1) the meeting of water and truck competition, (2) rate stability, (3) establishment of Prince Edward Island as a one-rate zone for shipment of potatoes to specified stations in Central Canada, and (4) extension of summer competitive rates throughout the whole year.

The agreed-charge arrangement had the effect of removing some of the disparities in rates that had existed in the area, although leaving a slight differential in favor of the rates from the Saint John Valley to the principal markets in Ontario, as compared with those from Prince Edward Island to the same destination. It was agreed in substance—(a) that to all designated points in Ontario the rates which would apply would be the same as the existing motor competitive rates from Grand Falls, New Brunswick, plus one cent per cwt.; (b) to designated Quebec stations, the rates would be the average of the competitive rates from the two zones on Prince Edward Island, except that to Montreal the rates would be two cents per cwt. over that from Grand Falls, New Brunswick. These agreed charges eventually went into effect as from March 1, 1954.

The percentage of increase over the base rates of 1948 is therefore not 89 per cent to all Quebec and Ontario destinations. The following tabulation shows the per cent increase in rates over 1948 from representative points:

**Per Cent Increase Current (July, 1955) Rates
Over 1948 Base Rates**

FROM: CHARLOTTETOWN, PRINCE EDWARD ISLAND:

TO:	April 7, 1948 Base Rate	March 1, 1954 Agreed Charge No. 75	% Increase
	cts.	cts.	
Montreal.....	30	50	66.6
Kingston.....	34	57	67.6
Ottawa.....	32	58	81.3
Toronto.....	38	65	71.0
London.....	43	76	76.7
Windsor.....	46	79	71.7

FROM: WOODSTOCK, NEW BRUNSWICK:

TO:	April 7, 1948 Base Rate	Sept. 21, 1953 Motor Competitive Rate	% Increase
	cts.	cts.	
Montreal.....	28	48	71.4
Kingston.....	33	56	69.6
Ottawa.....	31	57	83.8
Toronto.....	38	64	68.4
London.....	43	75	74.3
Windsor.....	46	78	69.5

Effect on Net Returns:

As was established repeatedly during prolonged hearings before the Board of Transport Commissioners and the Royal Commission on Transportation, the effect of rate increases on products shipped from surplus growing areas has been to reduce the return to the producers of those areas, and, generally speaking, by an amount equal to these increases, since the price the grower receives f.o.b. his local market must fully reflect the price delivered at the terminal market less transportation charges.

The fact that the percentage increase in rates for Maritime potatoes is somewhat less to the principal consuming points in Central Canada than was stated at the hearing, does not detract from the fact that freight increases are and have been substantial.

The relatively high cost of transporting Maritime potatoes to their markets has the result that average returns to growers in those areas are almost invariably much lower than the average returns received by growers in Canada as a whole.

Freight as a Percentage of Prices:

Charts No. 6 and No. 7, following, show the freight rates on potatoes from selected Maritime points to selected markets, as a percentage of the farm price.

It will be seen from these that transportation charges on potatoes shipped from the Maritimes, where potatoes are of prime importance to the agricultural economy, occasionally have amounted to more than the producer received for the product, and frequently have exceeded 50 per cent of the farm price. Without sufficient local outlets to keep his average transportation costs down, the Maritime potato grower finds himself in the unhappy position of having to pay these tolls on about 75 per cent of his marketable production.

It is not suggested here that the rates on potatoes are too high—in fact they would appear to be moderate in relation to those on other products and to the distances the product is carried; and low in relation to potato rates in other parts of Canada—but they are high in relation to the value of the product.

The position price-wise of the Maritime potato grower relative to that of his competitor in the Central Provinces is shown in Table XV, following. From this it will be noted that in most years, the price received by the Maritime farmer is much lower than that received by Ontario and Quebec growers, notwithstanding the fact that in these Central Provinces, Prince Edward Island and New Brunswick potatoes almost invariably command a premium.

The Maritime Freight Rates Act (1927):

"By trucking across the New Brunswick border and forwarding by rail to Montreal and other points (the Maine grower is) . . . taking full advantage of the provisions of the Maritime Freight Rates Act; not only does the Maine grower get his potatoes into Canada free of duty, but the Government of Canada subsidizes his movement of potatoes into our consuming centres by an approximate reduction in rail charges of 20 per cent." (Evidence—Canadian Horticultural Council—page 31).

Frequent references to the alleged ability of the Maine potato growers to take advantage of the Maritime Freight Rates Act were made during the hearing, it being argued that the favorable rates provided under the Act were being used for a purpose which was never intended; that is, the cheap transportation of competing foreign potatoes. It was not held that this activity was illegal, but unfair.

In this connection, the Board has been advised that the subsidy to the railways provided under the Maritime Freight Rates Act 1927 does not apply to goods carried to destination in completion of the delivery made by the producer or manufacturer of another country. (Board of Transport Commissioners

CHART No. 6 Freight Rates as a Percentage of Farm Prices per Bushel August 1947 to June 1955

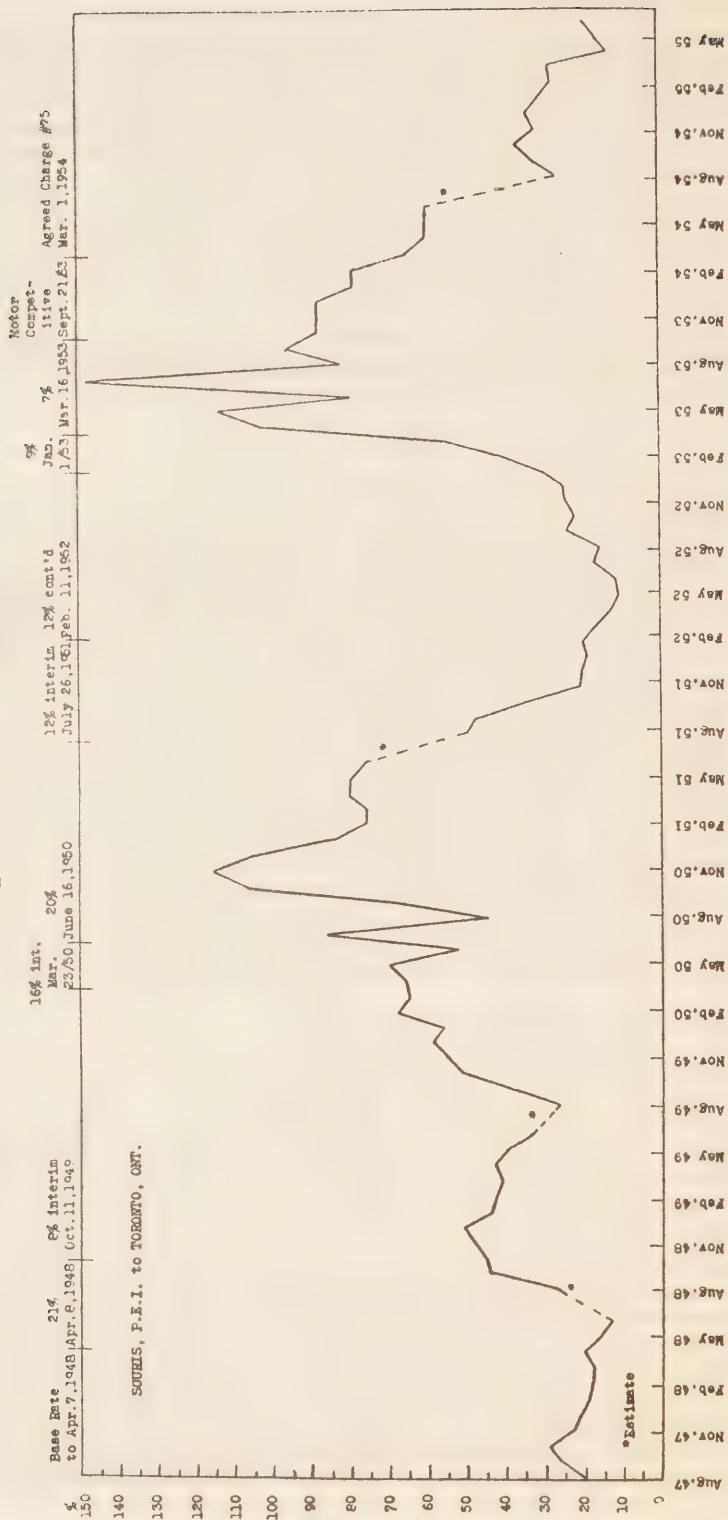


CHART No. 7 Freight Rates as a Percentage of Farm Prices per Bushel August 1947 to June 1955

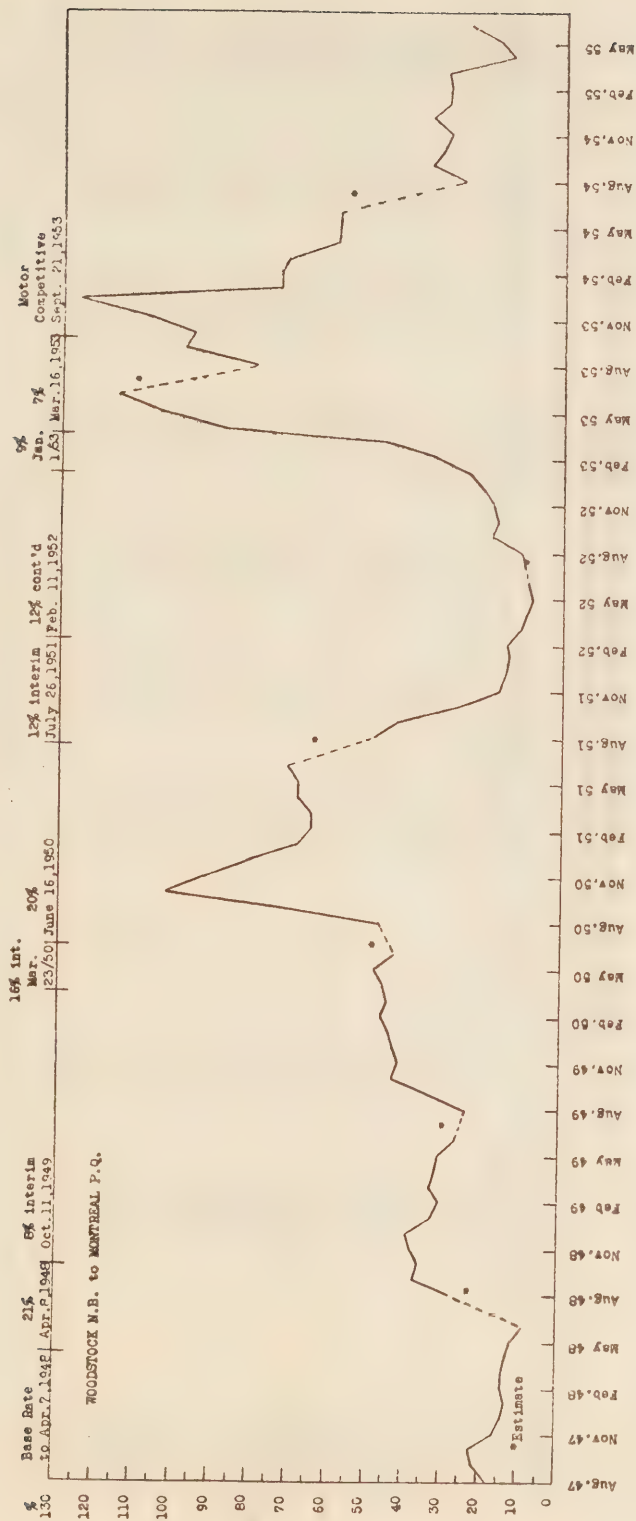


Table No. XV.—Average Farm Prices of Potatoes: Canada, Prince Edward Island, New Brunswick,
Ontario and Quebec, expressed as a % of Canadian Average, 1941-1954

Year	Average Farm Price-Canada	%	Average Farm Price-N.B.	% of Can. Average	Average Farm Price-P.E.I.	% of Can. Average	Average Farm Price-Ontario	% of Can. Average	Average Farm Price-P.Q.	% of Can. Average
1941.....	0.75	100	0.83	110.7	0.76	101.3	0.79	105.3	0.79	105.3
1942.....	0.91	100	0.93	102.2	0.75	82.4	1.14	125.3	0.97	106.6
1943.....	1.07	100	1.02	95.3	0.92	86.0	1.32	123.4	1.11	103.7
1944.....	0.91	100	0.77	84.6	0.80	87.9	1.15	126.4	0.89	97.8
1945.....	1.34	100	1.32	98.5	1.01	75.4	1.50	111.9	1.50	111.9
1946.....	1.02	100	0.86	84.3	0.64	62.7	1.18	115.7	1.11	108.8
1947.....	1.31	100	1.22	93.1	1.06	80.9	1.43	109.2	1.48	113.0
1948.....	0.98	100	0.72	73.5	0.67	68.4	1.18	120.4	0.97	99.0
1949.....	0.91	100	0.60	65.9	0.61	67.0	1.12	123.1	0.94	103.3
1950.....	0.74	100	0.40	54.1	0.40	54.1	0.97	131.1	0.81	109.5
1951.....	2.03	100	2.00	98.5	2.13	104.9	2.20	108.4	2.02	99.5
1952.....	1.68	100	1.20	71.4	1.24	73.8	2.15	128.0	1.93	114.9
1953.....	0.79	100	0.43	54.4	0.48	60.8	1.07	135.4	0.85	107.6
1954.....	1.26	100	0.95	75.4	1.03	81.7	1.58	125.4	1.30	103.2

SOURCE: Dominion Bureau of Statistics—Revised Estimates of Acreage, Production and Farm Value of Potatoes 1941-51 and Current Estimates, 1952-54.

Ruling dated Dec. 5/28. B.T.C. File D034822.13). However, it does apply to goods whose movement is broken; for example, goods of foreign origin imported and shipped out by a Halifax merchant would be eligible for the statutory rate. By the same ruling, potatoes, entering New Brunswick from Maine, would have to be shipped in the name of a Canadian potato shipper in New Brunswick, whose collaboration with the Maine grower would necessarily be close if the shipment of potatoes were to entitle the shipper to the low rate. It could fairly be said that in so far as the Government of Canada is paying the railways a subsidy on the movement of Maine potatoes, it is doing so as a result of the active co-operation of New Brunswick potato shippers. The Board was unable to determine what percentage of imported Maine potatoes was actually loaded on Canadian freight cars at New Brunswick points, but it would appear that a very substantial portion of the movement of these imports is a through movement by truck.

The rail rate which Maine growers are blamed for using is, by the railways' own definition, a motor competitive rate. The fact that a special rate has been made is therefore fairly strong evidence that motor competition exists; in fact, it has been estimated that about 15 per cent of the inspected shipments of New Brunswick potatoes are currently moving into Central Canadian markets by truck. It is a reasonable assumption that those trucks which are moving New Brunswick potatoes could also transport Maine potatoes at the same competitive rate. It has been learned by the Board that some 1423 carload-equivalents of Maine potatoes entered Canada by truck through the ports of Edmundston, Clair and St. Leonard between September 1, 1954, and July 16, 1955. In fact, probably very little if any of the movement through these ports in recent months has been by rail; and it is worth observing that nearly 95 per cent of the total imports of Maine potatoes intended for Central Canadian markets has been confined to the three ports named above. There is a strong presumption that these imports, which enter Canada by truck, continue to the terminal market by truck. What the Maine grower is apparently profiting by is, not the Maritime Freight Rates Act, as such, but a favorable transportation arrangement based largely on the existence of truck competition. If means were found to preclude him from use of the favorable rail-rate, trucks would remain available, and at rates about equivalent to the rail-rates.

Rail-rate Comparison:

A comparison of current rail-rates from representative potato-growing areas in Maine to Toronto and Montreal, with rail-rates from adjacent points along the New Brunswick border to the same terminals indicates a decided disadvantage to the Maine grower. The tabulation below gives the rates from one point each in Southern (Houlton), Central (Presqu'Isle), and Northern (Van Buren) Aroostook County to Montreal and Toronto, with comparative rates from adjacent New Brunswick shipping points:

Rail-rates on Carloads of Potatoes from Specified Points in Maine and New Brunswick to Montreal, P.Q., and Toronto, Ont.

(In cents per 100 lbs.)

	To Montreal	To Toronto
FROM		
Van Buren, Me.....	74.75	92.00
Fort Kent, Me.....	74.75	92.00
Edmundston, N.B.....	48.00	64.00
Presqu'Isle, Me.....	71.3	88.55
East Florenceville, N.B.....	48.00	64.00
Houlton, Me.....	64.4	83.95
Woodstock, N.B.....	48.00	64.00

(SOURCE: C.P. Railway Tariff No. E1510-D C.T.C. No. E5087. B.A. Railway Tariff No. 3020-I.D.D. 3073.)

The rates from Aroostook County are so much greater than the rates from nearby Canadian points that very little rail traffic in potatoes originates in these Maine points—the bulk of the movement being by truck direct to Montreal and other Canadian markets (except during those periods when truck movement is restricted) and the remainder by rail from New Brunswick points. The Board is informed, that of 1535 carlot-equivalents of potatoes shipped from Maine into Canada during the 1954-55 shipping season, only 40 carlots moved by rail.

New Brunswick shippers have access by rail to the Boston and New York markets at rates not greatly (if any) in excess of the cost of moving their potatoes to Montreal and Toronto. By trucking the very short distance to Maine loading points, Canadian shippers along the Maine-New Brunswick border may move potatoes into markets which no doubt Maine growers like to think of as their own. But even if New Brunswick potatoes are loaded in cars in New Brunswick, the excess of New Brunswick over Maine rates is small. Were it not for the United States duty against Canadian potatoes, the potato growers of New Brunswick, under present American freight charges, would have practically equal access with Maine growers to the largest potato markets of the United States. United States rail-rates as such, with perhaps a few exceptions, are therefore not a serious deterrent to the export movement of New Brunswick potatoes into nearby American markets.

Table No. XVI below gives the freight rates in effect from various principal growing areas of Canada to representative market cities. It will be seen from the table that the *carlot* movement of potatoes must, in the main, be confined to areas within a radius which infrequently includes markets beyond the next province. For example, the 90 cent rate per cwt. from Lethbridge to Vancouver is a serious deterrent to the movement of potatoes from Alberta to British Columbia; Manitoba potatoes are virtually prevented by prevailing rates from entering Ontario markets east of the Lakehead. Only the existence of special concessions in the form of agreed charges and of motor competitive rates permits Maritime potatoes to move as far westward as they in fact go.

Markets Are Regional:

Except for those classes of potatoes which may command a premium (for example, seed and "new" potatoes) sufficient to warrant the extra cost of a long rail haul, potato movement (and hence potato markets) tends to be regionalized. Therefore, there is no one Canadian potato market. Certainly these regional markets can and do exert some influence on one another, but that influence is much less marked than in other higher-priced agricultural products because it requires a relatively larger spread in price between markets to attract potatoes away from their local trading area. Consequently, there is no great evidence of keen competition between the provinces for each others' markets—transportation rates tend to shield or isolate each province from competition. The notable exception of course is competition between Prince Edward Island and New Brunswick—but even here, the competitive aspect has been almost equalized in respect of transportation, since potato rates have been arbitrarily set at a small differential relationship, notwithstanding the obvious fact that Prince Edward Island is much farther from major Canadian markets than is New Brunswick.

Pattern of Movement:

In the most general terms, marketing of potatoes consists of moving the product from areas of local or regional surplus into areas of deficit. At the local level, it involves the movement from farm to town or city; at the national level,

Table No. XVI—Freight Rates on Potatoes from Representative Shipping Points in Canada to Selected Markets

(in cents per 100 pounds)

Charlottetown, P.E.I.	Grand Falls, N.B.	Chatham, Ont.	Winnipeg, Man.	Lethbridge, Alta.	Grand Forks, B.C.
(1)	(3)	(4)	(6)	(6)	(6)
Montreal..... 50	Montreal..... 48	London.....	Brandon.....	Calgary.....	Vancouver.....
Toronto..... 65	Ottawa..... 57	Toronto.....	Regina.....	Edmonton.....	Calgary.....
Windsor..... 79	Toronto..... 64	Ottawa.....	Fort William.....	Regina.....	Edmonton.....
Winnipeg..... 136	Sudbury.....	Quebec City.....	North Battleford.....	Saskatoon.....	Regina.....
Regina..... 156	Winnipeg..... (2)	Winnipeg..... (2)	Edmonton.....	Vancouver.....	Saskatoon.....
Saskatoon..... 170	Regina..... 151	Regina.....	Sudbury..... (7)	Winnipeg.....	Winnipeg.....
Calgary..... 180	Saskatoon..... 166	Saskatoon.....	Toronto.....	120	139

References:

- (1) C.F.A.; C.T.C. (A.C.) No. 75.
- (2) C.F.A. Tariff No. 5-J; C.T.C. No. 1515.
- (3) C.N. Rys. Tariff No. C.M. 300-15; C.T.C. No. E. 4014.
- (4) C.N. Rys. Tariff No. C.V. 23; C.T.C. No. E. 1501.
- (5) C.P. Ry. Tariff No. E 2180-B; C.T.C. No. E5227.
- (6) C.P. Ry. Tariff No. W.22-B; C.T.C. No. W.4016.
- (7) C.F.A. Eastbound Tariff No. 11-G; C.T.C. No. 468.

Source: Transportation Unit, Economics Division, Department of Agriculture.

from the main producing regions to the areas of concentrated population. It is not surprising, then, that the principal potato markets of Canada are to be found in its largest cities. The St. Lawrence Basin, encompassing as it does so great a part of the population of Canada, is naturally the outlet for the surplus-producing provinces of Prince Edward Island and New Brunswick. It is also the final destination of most of the United States potatoes which enter this country.

The Board was unable to obtain sufficient information to determine accurately a precise pattern of interprovincial trade in potatoes. Records of rail shipments and of carlot-unloads are maintained, but little is recorded regarding interprovincial movement by truck. With the exception of Prince Edward Island, whose potato shippers have an agreed-charge arrangement with the railways involving the use of rail almost exclusively in interprovincial trade, records of car-unloads or of rail shipments must be taken as merely indicative of the movement, since indeterminate but probably quite large numbers of potato shipments are by truck. Nevertheless, the available data may be used as a fairly good indication of the *direction and limit* of the movement, if not of the quantity moved.

From the crop year 1949-50 to the crop year 1953-54, inclusive, Montreal was evidently by a wide margin the largest Canadian potato market in so far as rail shipments are illustrative. Montreal received almost double the number of domestic carlot shipments that went to the next market of importance—Toronto. Moreover, during the period under consideration, Montreal received almost half of the total carlot shipments of potatoes to all twelve principal Canadian markets. No less than 97 per cent of these shipments originated in the Maritime Provinces. Toronto received somewhat more than one-quarter of the total rail shipments, 91 per cent of which originated in the Maritimes. Next in order of size as rail-receivers are: Vancouver (3·7 per cent), Quebec City (3·2 per cent), and Halifax (3·2 per cent) (mostly for reshipment). The remainder of the rail movement is distributed among Edmonton, Calgary, Winnipeg, Regina, Saskatoon and Saint John.

Carlot-unloads are helpful in suggesting the importance to each province of the principal Canadian market cities:

Rail-lot Dispersal:

The following observations regarding Table No. xvii below are pertinent:

(a) *Maritimes:*

- (i) 90 per cent of the car-loads originating in Prince Edward Island and New Brunswick are destined to Montreal, Toronto, and Ottawa.
- (ii) Montreal is the principal destination of New Brunswick potatoes, Toronto of Prince Edward Island potatoes.
- (iii) Markets west of the St. Lawrence Basin are unimportant outlets for Maritime potatoes.

(b) *Central Provinces:*

- (i) Practically all rail movement of Quebec potatoes is to markets within that province.
- (ii) While Ontario potatoes have a wide range of movement to market cities, much the greater part is confined to Ontario and Quebec.

(c) *Prairie Provinces:*

- (i) 95 per cent of Manitoba shipments by rail are to Winnipeg, Regina, Saskatoon and Edmonton.
- (ii) Alberta potatoes shipped by rail go largely to Calgary and Vancouver.

Table No. XVII—Relative Importance (%) to each Province of the Twelve Principal Domestic Markets as indicated by Rail Carlot Unloads only; Crop Years 1949-50 to 1953-54

FROM:	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
TO:									
Halifax.....	9.2	95.8	.....	.....	9.9	.....	.....	.....	.....
Saint John.....	.....	.....	.....	.....	3.3	.....	.....	.....	.....
Quebec City.....	.....	.....	3.4	44.0	11.9	.....	.....	.....	.....
Montreal.....	31.4	4.2	67.3	52.0	18.6	.....	.....	.....	.....
Ottawa.....	9.5	.....	8.2	2.6	30.7	1.9	.....	.....	.....
Toronto.....	47.9	.....	15.9	.....	4.5	3.9	.....	.....	.....
Winnipeg.....	.....	.....	.....	.....	17.5	16.4	85.7	8.9	2.4
Regina.....	.....	.....	.....	.....	1.8	44.9	2.4	14.9	4.5
Saskatoon.....	.....	.....	.....	.....	1.0	15.0	7.1	13.4	3.8
Edmonton.....	.....	.....	.....	.....	.....	14.0	4.8	13.1	19.1
Calgary.....	.....	.....	.....	.....	.....	2.4	.....	24.8	11.9
Vancouver.....	.....	.....	.....	.....	.....	1.0	.....	23.9	58.2

NOTE: Figures under 1% omitted.

SOURCE: Market Information Section, Department of Agriculture.

(d) *British Columbia:*

- (i) British Columbia potatoes are infrequently shipped by rail east of Edmonton and Calgary.
- (ii) The greater part (58 per cent) of the rail-movement is to Vancouver.

It must be emphasized that since Table XVII relates to rail-movements, it is indicative only of the *direction and distance* of potato-movement and not of the importance of the named markets to the various producing areas.

By way of summary, it may be said:

- (a) Apart from the Maritime Provinces, which must move their potatoes considerable distances to markets, traffic in this product in other provinces is very largely limited to markets close at hand, and
- (b) the chief limiting factor to a wider movement is transportation costs.

Legislation re Marketing:

In this Section of its Report, the Board has dealt at some length with the pattern of the marketing of potatoes in Canada. In Schedule E of the Appendix will be found a summary of existing Federal and Provincial marketing legislation.

ACROSS—BORDER TRADE IN POTATOES

For nearly all of its long trading history with the United States, Canada has allowed potatoes from that country to enter free of duty (see History of the Potato Tariff, Schedule B). On the other hand, the United States traditionally has imposed a relatively high duty against the Canadian product. In spite of this disparity, the balance of trade between the two countries has generally been in Canada's favor.

Looking at the 25-year record of Canada's potato trading with the United States, one is immediately struck with the great preponderance of exports over imports. Table No. XVIII below shows our total exports at nearly 73 million bushels for the period; our imports, at about 30 millions. The balance of the movement in our favor was over 43 million bushels, the average yearly advantage working out at one and three-fourths million bushels. Only three times in that period were we net importers of potatoes, and in each such instance we imported rather heavily to supplement our own short crop.

Four-Phase Pattern:

Reviewing the past 25 years of trading, the whole period falls into four phases:

- (a) 1930-38: a protected period, during which the protection (either by way of statutory duty or a reciprocal-duty provision) was 75 cts. per cwt., except during the four months Jan. 1, 1936 to May 2, 1936, when there was no provision of any kind for duty—in other words, free entry.
- (b) 1939-42: during which the Canadian Tariff was free except during the six-week period, June 15 to July 31, and tariff quotas were instituted by the United States. (The principle of reciprocal duty had been abandoned.) The tariff arrangement in effect from January 1, 1939, prevailed until January 1, 1948.

**Table No. XVIII—Canada's Potato Trade (Table and Seed) with the United States,
1930 to 1954 (Bushels)**

Year	Production 000's	Exports	Imports	Balance + or -
1930-31.....	80,402	4,928,417	842,160	+4,086,257
1931-32.....	87,175	4,594,121	326,528	+4,267,593
1932-33.....	65,693	701,586	180,775	+520,811
1933-34.....	71,242	1,122,238	159,370	+962,863
1934-35.....	80,158	1,527,020	187,998	+1,339,022
1935-36.....	64,450	498,467	159,188	+339,279
1936-37.....	66,023	721,396	211,413	+509,983
1937-38.....	70,912	984,050	241,271	+742,779
1938-39.....	59,897	912,537	273,276	+639,261
1939-40.....	60,650	1,089,230	1,057,121	+32,109
1940-41.....	70,500	1,533,641	994,338	+539,303
1941.....	61,731	905,836	552,648	+353,188
1942.....	66,183	886,271	671,408	+214,863
1943.....	66,580	1,120,268	1,053,011	+67,257
1944.....	73,644	5,456,531	348,220	+5,108,311
1945.....	53,116	5,596,756	3,312,675	+2,284,121
1946.....	69,594	2,224,303	5,409,588	-3,185,285
1947.....	63,360	5,075,781	642,166	+4,433,615
1948.....	73,993	6,209,504	338,053	+5,871,451
1949.....	70,800	8,936,607	541,676	+8,394,931
1950.....	73,041	6,478,570	1,611,833	+4,866,737
1951.....	48,361	4,451,816	1,156,305	+3,295,511
1952.....	60,071	1,682,690	3,627,305	-1,944,615
1953.....	67,002	3,048,046	2,267,490	+780,556
1954.....	50,326	2,296,579	3,393,138	-1,096,559
Total.....	1,674,904	72,982,301	29,558,954	+43,423,347
Average 1930-1954.....	66,996	2,919,292	1,182,358	+1,736,933
Average 1930-1938.....	71,772	1,776,648	286,886	+1,489,762
Average 1939-1942.....	64,766	1,103,744	818,878	+284,866
Average 1943-1950.....	68,016	5,137,295	1,657,153	+3,480,142
Average 1951-1954.....	56,440	2,869,783	2,611,059	+258,724

Imports: calendar years and table-stock only.

Exports: calendar years.

Production: crop years to 1940-41.

(c) 1943-50: the period of high support prices in the United States, which attracted imports of Canadian potatoes in unprecedented quantities, and during which Canada obtained additional tariff concessions from the United States (largely in the form of increased tariff quotas on seed potatoes).

(d) 1951- : the current, post-support era.

In the immediate pre-war period, potatoes were fairly effectively kept out of the Canadian market by virtue of the provision for reciprocal duty. Canadian production was relatively high, and the ratio of exports to imports was of the order of 6:1. It was during this period that our seed potato trade with the United States was developed; exports to the United States, which consisted largely of seed, averaged 1,776,648 bushels per year for the period in question; while imports, consisting almost entirely of table potatoes, averaged only 286,886 bushels per year.

In the second of the four periods above indicated, which comprised the first three years of World War II, Canadian production fell by 10 per cent, on the average, imports rose sharply, and exports fell by 40 per cent. The United States Tariff Commission (1946) noted the changed pattern of trade in these words: "Since 1938, these imports (i.e.—into Canada) have trebled in volume;

this substantial increase has followed the concession granted in the trade agreement with the United States (effective January 1, 1939), permitting duty-free entry of potatoes from the United States, except during the six-week period, June 16—July 30, inclusive." (Source: United States Tariff Commission, War Changes in Industry Series, Report No. 16—Potatoes.)

On October 2, 1942, Congress passed the Steagall Amendment, a price-support program which greatly affected production and prices in the United States and encouraged importation of Canadian potatoes. The Steagall Amendment provided for wartime and post-war support. Under it, the United States Department of Agriculture was required to support the price of potatoes during the war and for two years thereafter at not less than 90 per cent of parity, though it subsequently developed that the price was supported at 80 per cent of parity. In 1948, an amendment extended the objectives of the Steagall Amendment through 1949, but provided that the 1949 potato crop be supported at 60 per cent of parity, which was done. The 1950 crop was subsequently supported at 60 per cent of parity as well.

Results of United States Supports:

The effect of these price supports in the United States was that average potato prices to the grower nearly doubled. For the first three crop years, (1943-45), the average price received was \$1.35 per bushel, as compared with 70 cents per bushel in the 1935-39 period.

Little immediate effect on Canadian export to the United States was evident in 1943; the trade was roughly in balance. But in 1944 and in the year following, Canadian exports rose to well over five million bushels each year from a prewar average of around one million bushels. Canada's imports for these two years averaged only a little over one and one-half million bushels. However, as a result of an all-time record crop in 1946 in the United States, which followed a short Canadian crop in 1945, the normal trading relationship was reversed and in that year 5,409,588 bushels entered this country, a record high figure. A very important part of these imports consisted of direct Canadian Government purchases, and of government-subsidized purchases by the private trade.

From 1947 to 1950, inclusive, Canada's exports to the United States soared, reaching nearly nine million bushels in 1949. This movement was assisted by the Geneva Trade Agreement of 1947, effective January 1, 1948, which, among other things, had secured for Canada an increase in the tariff quota on seed potatoes entering the United States from one and one-half to two and one-half million bushels.

While Canada's potato growers were making the best of the price situation in the United States, their American competitors were taking advantage of opportunities provided by the Steagall Amendment. In the first year of price supports, 568,000 more acres of potatoes were harvested in the United States and total production rose to the (then) record of 464,656,000 bushels, almost 100 million bushels more than in the previous year. United States production stayed well over the 400 million bushel mark in most years from 1943 to 1950; but in these years (except 1946) Canadians exported from five to nine million bushels per annum to the United States, representing from eight per cent to 12 per cent of our total national production.

In 1948, the United States Tariff Commission made this observation: "Imports, although still small relative to domestic production, have increased substantially in recent years largely because of the very favorable market

conditions for Canadian potatoes in the United States, generated by the price-support program of this country. Most of these imports entered at a time when the domestic market was already glutted or when a glut was impending."

United States Protests Exports:

It was inevitable that this condition would not long remain unprotested. It was claimed by the United States authorities that appreciable quantities of certified seed imported from Canada were being used for purposes other than propagation. Consequently, through an exchange of notes on November 23, 1948, Canada and the United States made an agreement wherein Canada instituted an export-permit system for the 1948 Canadian crop. No further exports of table potatoes were to be made, and permits for seed potatoes were to be issued to Canadian exporters on a time-schedule basis, to be shipped only to those States of the Union where there had been a traditional demand for certified seed, and only during a short period immediately preceding the normal planting date.

Notwithstanding this arrangement, exports of Canadian potatoes in 1948 reached the unprecedented figure of 6,209,504 bushels; and in 1949 the record movement of 8,936,607 bushels into the United States was achieved. By 1950, the United States Government had purchased quantities of potatoes vastly in excess of Canadian exports in order to maintain its high-support program. These stocks were either disposed of in various ways at a fraction of their cost, or destroyed.

Following the end of price-supports, both Canada and the United States reduced potato production sharply. In 1951, United States production dropped by 109 million bushels, or about 25 per cent, while the Canadian reduction was about 34 per cent. However, exports to the United States continued high in 1951 because of the abnormally small crop in that country—and in spite of an abnormally small crop here.

The current era, which may be said to have begun in 1951 and continues to the present time, is characterized by a completely different trading relationship. Average calendar year exports to the United States in the 1951-54 period have been 2,869,783 bushels as compared with 5,137,295 during the period of high United States supports. Imports into Canada, on the other hand, have risen from their 1943-50 average of 1,657,153 bushels to 2,611,059 bushels.

Contentions re Tariff:

The substance of those representations of the Canadian Horticultural Council which dealt with imports of United States potatoes vis-à-vis the Canadian Tariff was:

- (a) The Canadian potato industry, which had received from the Canadian Government some measure of protection, was almost wholly abandoned to the competition of United States potatoes as a result of the Trade Agreement of 1938; and that
- (b) Had it not been for the intervention of the war, and special conditions which followed the war, competition from the United States would have "just about wiped out our industry."
- (c) The full effect of the "nakedness" in which the Canadian potato industry was left by the 1938 Trade Agreement was delayed until the period 1951-54, following the end of United States Price Supports, although to a lesser degree the effect of virtually free entry had been felt as early as the years 1939-41.

In support of its argument, the Council cited the record of average production and imports by selected periods:

Period	Average Production	Average Imports
	bus.	bus.
1930-38.....	71,772,000	287,108
1939-41.....	64,293,000	868,036
1942-47.....	65,413,000	1,906,178
1948-50.....	72,611,000	830,465
1951-54.....	56,440,000	1,566,719

Other Factors Involved:

The figures, if taken by themselves, would certainly suggest that there was a great increase in imports of potatoes following the 1938 Agreement. They also may indicate some degree of correspondence between high imports and lower domestic production. The Board is compelled to draw attention to other facets of the import story which modify any conclusions that might be drawn from a consideration of the above figures alone:

- (i) By comparing the imports of late potatoes by crop year, rather than by periods of years, it will be seen that high imports usually followed seasons of short crops in Canada. Hence, the inference that lowered production may be the result of high imports is not entirely valid.
- (ii) From (i) it follows that to a degree the Canadian grower created the conditions which favor high imports—i.e., by reducing acreage as a reaction to low price levels obtaining for the previous crop. The imports flowed in to fill the gap in production.
- (iii) The increase in imports following the 1938 Agreement, i.e., in the period 1939-41, was not significantly high, although the percentage increase was substantial; the reason being that the general level of imports, potatoes included, prior to 1939 was abnormally low, whereas following 1939 it was relatively high. Consequently, even a moderate increase in imports would appear large, percentage-wise.
- (iv) As is pointed out elsewhere in this study, a very high percentage of these imports comprised “early” potatoes, much of which entered Canada during the duty period; thus the absence of a duty could not have been the sole reason for an increase in imports.
- (v) The relatively high average imports of potatoes during the war period, 1942-47, was not wholly or perhaps even largely due to the absence of a tariff, but to (a) unusually high wartime demand; (b) the short Canadian crop of 1945; (c) very substantial Canadian Government purchases of United States stocks, and (d) Government payments of import subsidies necessary to maintain the domestic price ceilings in 1945 and 1946.

The Board cannot support, therefore, without some reservations, the statement of the Canadian Horticultural Council that “Importations into Canada are almost all table stock *which is neither demanded nor required.*” (Evidence—Page 25). Nor can it subscribe to the view that the increase in potato imports following the 1938 Trade Agreement was wholly the result of “virtually free entry”.

Potatoes for Chipping:

At the public hearing, representations were made by the manufacturers of potato chips respecting the difficulties they faced from time to time in securing in Canada supplies of potatoes of “chipping quality”. The deficiency generally

occurs, they said, at the time of year when they are ready to go into volume production and when imports of the processed product are in full movement into their market. They suggested that the Government might establish an end-use item of which they might avail themselves when circumstances warranted. The Board is of opinion that, in view of the powers vested in the Governor-in-Council under Section 273 of the Customs Act, a tariff classification based upon end-use is not necessary.

Recent Highs and Lows:

The period 1951-55 (crop years) is important in this study because it was during that time that imports from the United States really began to cause serious concern to the Canadian potato industry. For that reason the Board has undertaken to review in greater detail what actually took place in respect of production, imports, exports and prices during those years.

During the last two years (1949 and 1950) of United States potato supports (which had been reduced by Congress from 80 to 60 per cent of parity) average prices to United States farmers dropped from \$1.54 to 91 cts. per bushel, and from \$1.31 to 91 cts. per bushel to Canadian farmers. Consequently, when it became known that the United States would no longer continue potato price-supports, both Canada and the United States in 1951 very drastically cut their potato acreage—Canada, from 369,000 acres to 284,900 acres. These reductions were reflected in a decrease in production in that year which amounted to about 109 million bushels in the United States and 25 million bushels in Canada. The result was that in both countries the lowest crop in several decades was harvested.

Price-wise, the effect of this reduction was that in 1951 and early 1952 Canadian producers received the highest *average* price for their potatoes ever recorded. Furthermore, at that time the Canadian average price to farmers was considerably higher than the American average price. Our principal wholesale markets rose steadily from the beginning of the late potato marketing season, October 1, 1951, and were still rising at the end of the following April when the "new crop" potatoes came on the market. They continued to rise until July. Prince Edward Island potatoes at wholesale, in Ottawa in June of 1952, averaged the staggering figure of \$8.59 per cwt.

During this high-price period, both the Toronto and Montreal potato markets registered monthly average prices consistently higher than those of New York, the difference ranging from 10 cents to \$1.25 a cwt. Under those circumstances it was inevitable that United States imports into Canada would increase substantially. From October, 1951, to the following April, both months inclusive, Canada imported 1,197,927 cwt. of United States late potatoes compared with 102,947 cwt. in the same period of the previous year.

During the months in question, exports, which were largely seed, were relatively low. The year 1952 was one of few when imports exceeded exports, a development almost entirely attributable to an abnormally low crop and high prices in this country.

The reaction of growers to such prices on both sides of the border was to expand production for the 1952-53 marketing period. Canada increased potato plantings by 12,000 acres and production rose by 12,000,000 bushels (24.2 per cent). American production, however, rose by only 29,000,000 bushels (8.9 per cent). Net per capita supply in Canada increased from 3.5 to 4.0 bushels. Average farm prices declined from \$2.03 to \$1.68 in Canada, but advanced from \$1.63 to \$1.96 in the United States, reflecting possibly the much more moderate production increase in that country. Total Canadian exports in that year again exceeded imports. (See Table No. XIX).

Table No. XIX—Changes in Production and Average Prices, Canada and United States;
Total Exports, Imports and Net Supply—Canada, 1951-52 to 1955-56, Crop Years

Crop Year	United States Production (000 bus.)	% Previous Year	Season Average Prices Received by Farmers (\$)	Canadian Production (000 bus.)	% Previous Year	Average Farm Price (\$)	Total Exports (000 bus.)	Total Imports (000 bus.)	Net per Capita Supply (bus.)
1951-52.....	320,519	74.5	1.63	48,361	66.2	2.03	2,675	3,833	3.5
1952-53.....	349,098	108.9	1.96	60,071	124.2	1.68	4,352	2,285	4.0
1953-54.....	380,075	108.8	0.78	67,002	111.5	0.79	5,522	1,982	4.3
1954-55.....	355,099	93.4	1.30	50,326 ¹	75.1	1.26 ¹	2,706	5,041	3.5
1955-56.....	392,539 ²	110.5	.....	54,334 ³	108.0	.....	.....	.....	.....

¹February 1955 Estimates, Dominion Bureau of Statistics. (The Tariff Board Estimate of average Farm Price, as of July 31, 1955, was \$1.60.)

²September 10, 1955 Estimate, United States Department of Agriculture.

³August 30, 1955 Estimate, Dominion Bureau of Statistics.

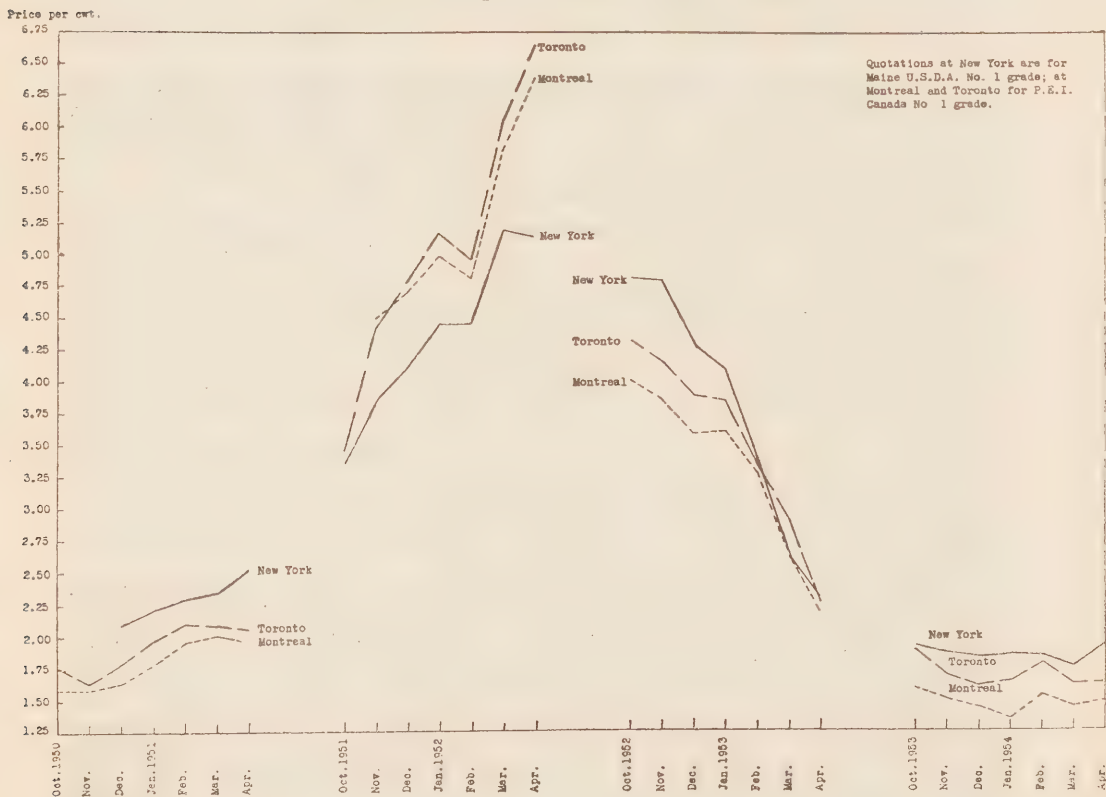
SOURCE: Revised Estimates of Production, Value and Stocks of Principal Field Crops 1953 and 1954 D.B.S.; Department of Agriculture—Crop and Seasonal Price Summaries—Fresh Fruit and Vegetables Vol. VII, 1953-54, Pt. II. Revised Estimates of Acreage, Production and Farm Value of Potatoes, Canada, 1941-1951; and Current Estimates 1952-54; Crop Production Annual Figures from United States Embassy, Ottawa. 1955 Crop Estimates from Dominion Bureau of Statistics.

When it became apparent in the fall of 1952 that considerably more supplies of potatoes were available, prices began to fall on all the principal markets. The New York potato market was, however, higher throughout this decline than either Toronto or Montreal until February of 1953, when it dropped below the Toronto market, but remained roughly equal to Montreal (see Chart 8 below.) It is significant that during February and March, 1953, imports of United States potatoes again increased, undoubtedly owing to the greater attractiveness of the Canadian market, after allowing for relative costs of transportation to alternative United States points.

CHART No. 8

Average Monthly Wholesale Quotations for No. 1 Grade Late Potatoes at New York, Toronto and Montreal

October to April inclusive 1950 to 1954



Too Many Potatoes:

In the spring of 1953, despite the rapidly falling market, Canadian farmers, undoubtedly influenced more by 1952 average prices than by those prevailing at seeding time, again decided to enlarge their potato acreage. They seeded 321,000 acres as against 296,800 in the year preceding—a rise of 8.2 per cent. As is frequently the case, the collective production decision was wrong. Growing conditions during 1953 were unusually favorable to a large crop; yields reached

208·7 bushels to the acre, the best so far attained as a national average. Production was 67,002,000 bushels. As was to be expected, prices in Canada dropped—to the lowest point since the 1950-51 crop. Exports to the United States for the crop year 1953-54 exceeded imports, as indicated hereunder:

**Changes in Imports and Exports,
Canada and United States—Crop Years*
1951-52 to 1954-55
(bushels)**

Crop Year	Table	Exports		Imports Table and Seed
		Seed	Total	
1951-52.....	155,349	1,325,370	1,480,719	3,832,825
1952-53.....	981,292	1,900,934	2,882,226	2,285,293
1953-54.....	868,152	1,703,077	2,571,229	1,982,260
1954-55.....	204,850	1,280,497	1,485,347	5,008,760

* Crop Year—August 1 to July 31

SOURCE: Dominion Bureau of Statistics.

The year 1953 was disastrous. While Canadian growers received on the average 79 cents a bushel at the farm, those in Prince Edward Island and New Brunswick earned less than 50 cents. The large freight content of the low wholesale prices obtaining on Central Canadian markets was responsible for what proved to be the lowest net return to any area in Canada.

On February 12, 1954, an event took place which for a time rather disorganized the potato industry in Eastern Canada, and particularly that of New Brunswick. Prior to that date, Maine growers, anticipating the re-establishment of United States potato supports, had perhaps been less aggressive than usual in pushing liquidation of the remainder of their 1953 crop. Prince Edward Island potatoes at this time had largely been marketed. However, on February 12, the United States Secretary of Agriculture announced that there was to be no potato support. The Maine growers, according to the Board's information, reacted to this announcement by offering large quantities of potatoes on the Canadian markets at prices well under the market levels which had prevailed. In order to prevent this influx of United States potatoes and thus forestall a serious loss of sales, the New Brunswick Potato Marketing Board immediately dropped its prices by 15 cents per 75-lb. bag.

Official statistics do not record an unusually large import of potatoes during the weeks which followed Mr. Benson's (U.S. Secretary of Agriculture) announcement. Indeed, imports of United States potatoes for the months of February to April, 1954, inclusive, were lower than in the same period of any recent year except 1952, when, of course, there was a shortage of Canadian potatoes. However, the threat of importations hung over the heads of the Maritime growers for the months in question, and prices fell on the average by 10 cents to 20 cents per cwt. at the wholesale level, probably the amount necessary to prevent Maine potatoes from displacing Maritime potatoes on the markets of Central Canada.

Reacting to the experience of 1953, the potato growers of Canada in 1954 sharply reduced their acreage (for the second time since 1950) to about the 1952 level of 296,000 acres. The acreage reduction was accompanied by low yields, attributable to field frost, adverse moisture conditions and late blight—and perhaps, even, to a lesser application of fertilizer. The result in 1954 was another short crop of 50,326,000 bushels. Consequently, heavy imports filled the gap in domestic supply. During the latter five months of 1954, nearly one

million cwt. of United States late potatoes entered Canada, an amount exceeded only in the comparable period in 1945, when, under Canadian Government subsidy and purchases, approximately one and one-half million cwt. had entered.

Imports of potatoes continued into Canada at a high rate during the first six months of 1955. While exports for the crop year 1954-55 were about half those of the previous year, imports more than doubled.

Violent Yearly Fluctuations:

Briefly, the period covered by the crop years 1951-52 to 1954-55 could be summarized thus:

Production: (a) annual production of Canadian potatoes in these four years varied from a low of 48,361,000 bushels to a high of 67,002,000, a maximum swing of 19,000,000 bushels; (b) in two of these crop years, Canada harvested its smallest and its second smallest crop of the half-century; (c) in only one of the four years was the crop near the long-term average; and (d) production for the four years averaged 56 million bushels as against the long-term average (25 years) of 66 million.

Exports: (a) averaged 3,813,880 bushels over the four crop-years; (b) were characterized by wide variations from year to year, but still slightly greater for the four-year period than imports.

Imports: (a) the yearly average was 3,285,000 bushels; (b) this was more than one and one-half million bushels per year greater than the wartime average (1943-50); and (c) varied greatly from year to year, depending on production and prices in Canada.

Prices: average prices to Canadian growers varied from a high of \$2.03 per bushel (in 1951-52), the all-time high, to 79 cents (in 1953-54), the second lowest since the 1941-42 crop-year.

The obvious comment is that this "post-support era" has been one of violent yearly fluctuations, characterized by extremes in nearly all its aspects.

What is a "Normal" Period?:

During the public hearing, considerable stress was placed on the idea that the current or post-support era is "normal", and that the pattern and balance of trade as between the United States and Canada worked out during the past four years will be the one to obtain in the future. This pattern, it was suggested, is the inevitable result of the 1938 Trade Agreement which permitted virtually free entry of United States potatoes. "Considering the individual item of potatoes", says the New Brunswick brief, "the last three years of trading with the United States (1952-54) in this commodity gives a normal picture of the balance of the imports and exports, since, previous to that period, the United States had a Government-supported floor on the price of potatoes". (The United States floor prices actually ended in 1950, not in 1951.) Dealing with this period (1952-54) of Canada-United States trading in potatoes, the Canadian Horticultural Council brief states: "It cannot be argued that in the three-year period under review, special conditions of demand and supply, or other conditions of a temporary nature, caused this large quantity of imports."

"Normal" in this context is presumed to mean usual, or customary. Applying the ordinary meaning of the term to the conditions of potato trading between Canada and the United States, the Board sees very little evidence of normality in the situation. To begin with, the post-support era must include the year 1951, since that was the first year of operations in both countries without

the assistance of United States supports. To exclude that year from the calculations is to distort the picture. However, the review of figures of production, consumption, acreage, yields, exports, imports and prices given earlier in this Report reveals such wide changes and variations from anything which might be considered normal, in the sense of being "average", that the Board is compelled to disagree with the contention that normal trade relationships have prevailed in the four years under consideration.

The Board is more inclined to the view that the post-support era is more accurately described as "transitional"; normality, if it is to come, is still some time in the future. The potato industry in both Canada and the United States has been undergoing the adjustments common to many industries in the post-war years; however, these came much later in the case of the potato industry, because they were delayed by the action of the United States Government until after 1950; and delay may well have caused them to be more difficult.

"Domination" by New York:

A good deal of emphasis was placed at the hearing on alleged United States domination of Canadian markets. One of the main reasons for the sharp drop in production following 1950 was, according to the Canadian Horticultural Council, "the ability of American marketing agencies to dominate Canadian markets through means of lower transportation costs by motor transport and distress selling and 'free' entry into Canada for 46 weeks each year."

A comparison of monthly average wholesale quotations for potatoes on the New York, Toronto and Montreal markets for the late potato marketing months, October to April, inclusive, for four successive years indicates a very noticeable correspondence among these three markets (see Chart No. 8 above.) In three of the four years, the New York market "dominated" the other markets in the sense that it was higher, and certainly the rise and fall of the lesser markets followed New York. However, in the period, October, 1951, to April, 1952, both Canadian markets were consistently higher than New York. Incidentally, that period was characterized by the very high prices which reflected the short Canadian crop of 1951; it saw a very marked increase in the importation of United States table potatoes, unquestionably brought in because of the high prices which prevailed in Canada.

By relating monthly imports of United States table potatoes to comparative price trends, it is obvious that the periods of greatest importations are those during which the New York price is at or under Canadian levels.

There is little doubt, however, that the ease with which United States potato growers—and particularly those located along the border—can and do enter this market in most years has influenced the level of prices and is therefore an important factor in determining returns to the Canadian grower. In particular, when the American crop is in surplus there is virtually no possibility of Canadian prices rising above what would, in the above circumstances, normally be low American prices. On the other hand, when the Canadian crop is large relative to domestic requirements, it cannot find an outlet in the United States unless Canadian prices are depressed below the United States price sufficiently to absorb the duty of 37½ cts. per cwt.

CROP PROSPECTS—1955-56

At the conclusion of this enquiry, very little could be known of the fortunes of the 1955 potato crop, much of which had yet to be taken from the ground. What little was known, and that necessarily limited to estimated production and yields, provided further illustration of two facts: one being that,

as noted heretofore, prices obtained for the crop of the year previous are a very important factor in determining whether the growers will decide to plant more or less potato acreage; the other being that whatever that decision, the intervention of Nature frequently changes the production results and confounds the forecasters.

The growers of Canada and the United States, encouraged by what must have been regarded by them as a satisfactory return for the 1954 crop, decided to increase their plantings. United States potato farmers, according to the United States Department of Agriculture official crop estimate of July 10, added 35,800 acres to their 1954 acreages, a modest two and one-half per cent. Canadian farmers, as early as March 1, had indicated that they "intended" to plant approximately 12,000 more acres to potatoes, representing an increase over 1954's 296,200 acres of 4.3 per cent. Coupled with the increase in plantings, the particularly good growing conditions which prevailed in most of Canada and the United States in the weeks immediately following seeding, and which were especially true of those states and provinces where the large scale production is carried out, gave rise to a widely held belief throughout the industry that the seemingly ever-recurring history of shortage followed by surplus might be repeated in 1955.

At this point, it may be of interest to compare Canadian potato farmers' "intentions" as of March 1, 1955, with the actual acres planted:

	Intentions as of ¹ March 1, 1955, % change from 1954	Acres ² Actually Planted	% Actual change from 1954
Prince Edward Island.....	+8	41,000	+11
Nova Scotia.....	+6	12,300	+9
New Brunswick.....	+4	47,000	+3
Quebec.....	+4	92,100	no change
Ontario.....	no change	58,000	+3
Manitoba.....	+5	19,000	+11
Saskatchewan.....	no change	11,600	+4
Alberta.....	+17	15,900	+3
British Columbia.....	no change	9,400	-8

¹ Dominion Bureau of Statistics Report of Intended Acreage of Principal Field Crops in Canada,—issued March 16, 1955.

² Dominion Bureau of Statistics Report, Preliminary Estimates of Crop and summer-fallow acreages, issued August 5, 1955.

It would appear, then, that in seven of the nine provinces reporting, farmers were sufficiently optimistic about market prospects to increase plantings by three to 11 per cent. Total acres planted were 306,300—10,100 more than were planted in 1954.

On the other side of the Border, American crop forecasters in mid-June foresaw a potato crop amounting to some 375-385,000,000 bushels, a figure considerably in excess of the 350,000,000 bushels which, in that country, are thought to be "adequate" for its requirements. Hence, at the time of the Board's public hearing on June 13, conditions seemed to be right for a sizeable surplus potato crop, certainly in the United States, probably in Canada.

The official United States Department of Agriculture crop estimate, issued on July 10, 1955, gave substance to that view when a crop of 401,146,000 bushels was indicated. This estimate was revised downward in the latest official crop estimate of September 10, to 392,539,000 bushels, the largest potential harvest since 1950's 429,000,000 bushels and 37,440,000 bushels greater than the 1954 figure. The increase, according to United States Department of Agriculture data, was very largely attributable to a record anticipated yield of 271.9 bushels to the acre, exceeding the previous high yield of 1950 by 18.5 bushels.

The effect of the publication of the July 10th crop estimate was to cause general concern throughout the industry in both countries. On the first trading day following the announcement, potato futures on the New York Mercantile Exchange fell sharply. November futures quoted in the Journal of Commerce on July 1 at \$1.88 per cwt., had by July 19 fallen to \$1.55, the greatest decline being recorded on July 13 when quotations for all delivery months from November to March fell about 20 cents.

Potato Futures—New York Mercantile Exchange

	Nov.	Dec.	Jan.	Feb.	Mar.
July 1.....	1.88	2.00	2.07 ^b	2.17	2.28
July 12.....	1.83	1.92 ^b	2.01 ^b	2.09 ^b	2.23
July 13.....	1.63	1.72	1.80	1.90	2.01
July 19.....	1.55	1.65	1.67	1.77	1.85
Sept. 30.....	1.61	1.67 ^b	1.73 ^b	1.75 ^b	1.88

It is widely held that the weather in the month of July is a critical factor in determining the size of the late potato crop—and the weather in the Canadian central provinces in July, 1955, was possibly the driest experienced in that area in over 40 years. Drought, which continued throughout the whole of July and part of August over the greater part of Ontario and Quebec, without doubt severely damaged the potato crop in those provinces, which, as has been noted, together usually produce 40 per cent of the Canadian potato crop. When the August 30 estimate of potato production was issued, Quebec was found to have the prospect of the lowest potato crop of any year in the period (1930-1955) covered by this enquiry, while in Ontario estimated production was lower only once in that period. Elsewhere in Canada, most provinces increased their production moderately, but only New Brunswick measured up to the early unofficial crop forecasts.

Estimates of potato yields and production as of August 30, 1955, by provinces were:

Province	Yield per Acre		Production	
	bus.		bus.	
Prince Edward Island.....	253.0		10,373,000	
Nova Scotia.....	220.0		2,706,000	
New Brunswick.....	266.0		12,502,000	
Quebec.....	114.0		10,499,000	
Ontario.....	166.0		9,628,000	
Manitoba.....	105.0		2,000,000	
Saskatchewan.....	112.0		1,300,000	
Alberta.....	164.0		2,600,000	
British Columbia.....	290.0		2,726,000	
Canada.....	177.4		54,334,000	

Thus, while the Canadian potato crop in 1955 is apparently to be eight per cent larger than it was in 1954, it has failed to reach the size which, in some quarters, was predicted for it and which increased acreage and good early growing conditions seemed to indicate. In fact, it is, if the estimates prove to be accurate, about 2,000,000 bushels less than the average of the previous four years.

The early prospect of a surplus in Canadian production now appears improbable—a situation which is the occasion of little comfort to the growers of Canada, who continue to regard the existence of a large surplus of potatoes in the United States with concern.

REPRESENTATIONS RE CUSTOMS TARIFF

The formal request of The Canadian Horticultural Council and of The Canadian Federation of Agriculture and other supporting bodies (in so far as concerns the provisions of the Customs Tariff of Canada) has been set forth in the opening section of this Report. Briefly, the request was: (a) for the deletion of the provision for the free entry of seed potatoes, and, (b) for the application, on a year-round basis, of the seasonal duty of $37\frac{1}{2}$ cents per cwt., which at present applies only during the period June 15-July 31.

In presenting its formal request in the above terms, The Canadian Horticultural Council expressed its desire "that the United States Customs Tariff on both seed and table potatoes remain as at present and in accordance with existing Trade Agreements".

The arguments advanced by The Canadian Horticultural Council and supporting bodies in favor of the granting of their request have been summarized, analysed, and commented upon in the body of this Report. In essence, these were that the potato growers of Canada should have, in respect of a commodity which represents a substantial across-border movement in each year, tariff treatment at least not less favorable than that accorded by the United States Tariff to the potato growers of that country, and that this treatment should apply to *all* potatoes (whether seed or table-stock).

During the inquiry, one protest was made to the Tariff Board against the granting of the request of the various applicant bodies. The Canadian Association of Consumers objected, at the public hearing, to any increase in the rate of duty on potatoes imported into Canada and to the extension of the present seasonal duty on a year-round basis. The substance of the argument presented by the Association was:

- (a) A price increase to Canadian consumers as a result of the granting of the request would be inevitable and would be borne largely by that section of the Canadian consuming public which could least afford it: the low-income groups;
- (b) because of Canada's unusual trading relationship in potatoes with the United States—each country being the other's best "potato customer"—the United States might take retaliatory measures, perhaps against other Canadian agricultural commodities.

The Canadian Association of Consumers cited, at the public hearing, the Consumer Price Index for the month of May, 1955, which rose in a thirty-day period from 116.1 to 116.4 due almost entirely, according to the Dominion Bureau of Statistics, to an exceptionally sharp increase in the price of potatoes, from 47.8 cents to 73.8 cents per ten pounds. This increase in the Consumer Price Index had also accounted for the advance in the Food Index from 111.0 to 112.3 (D.B.S. Price Movement, May, 1955).

Contrariwise, it was contended by the various applicants that the imposition of the requested duty of $37\frac{1}{2}$ cents per cwt. would have an almost imperceptible effect on the price to the Canadian consumer; indeed, one delegation submitted that it would have no effect whatever.

SUMMARY

1. A basic factor in the situation facing the Canadian potato-grower is the progressive decline in the demand for his product. Total production per annum today is about what it was in the '80's, despite a four-fold increase in population; consumption per capita has declined drastically and appears to be still declining. In a word, more and more Canadians are consuming fewer and fewer potatoes.

2. With total production almost static—and although potatoes are still grown on almost all farms—the trend has been toward concentration of production in relatively few specialized areas, signally outstanding by reason of their constantly-rising yields per acre.

3. This trend toward concentration of specialized production on a commercial basis has had as a concomitant (a) increasing resort to expensive power equipment for planting, spraying, harvesting, grading, and shipping and (b) the intensified use of fertilizer. Labor-saving machinery is costly; and capital investment therein on a substantial scale can be justified only if it reflects itself in increased efficiency—perhaps the most reliable criterion of which is yield per unit of cultivation.

4. Mechanized farming as applied to potatoes is much more general in the United States than in Canada, and particularly so in those highly-specialized areas of production which lie, from East to West, just below the border, and from which come the imports of late potatoes of which Canadian growers have complained. In these competitive contiguous-areas, yields per acre are very high by Canadian standards generally. These are the areas where intensified production, widespread use of mechanical equipment, "assembly-line" methods, high fertilization, and scientific storing and handling, have so dominated the United States potato industry as a whole that, as long ago as 1949, less than one per cent of the farms in that country produced two-thirds of the total quantity of potatoes grown on farms reporting potato production.

5. Normally, the obvious market—and as a general rule, the most profitable market—for potatoes is the area in which they are produced. Largely water by weight, potatoes are an expensive commodity to transport any appreciable distance; in general, they do not move far if there is a substantial or mass-market close at hand. Principal or mass-markets exist, for example, in Ontario and Quebec, in eastern Canada; and in British Columbia, in western Canada. No such immediate mass-market exists for the great producing provinces of New Brunswick and Prince Edward Island.

6. Since cash returns to the grower are related directly—and, in one sense, in almost inverse ratio—to the distance his product has to travel to its ultimate market, transportation costs bear with inordinate weight, therefore, upon the growers of Prince Edward Island and New Brunswick, (with no local market to speak of). In these two provinces, average returns to the growers are normally substantially less than average returns to growers in Canada as a whole. Conversely, the highest returns per acre are achieved, as a general rule, in areas where the local market absorbs the bulk of local production (e.g.—British Columbia).

7. Reference to costs of transporting potatoes necessitates the comment that the growing use of the motor-truck—either the grower's own truck, or a hired vehicle—is having a definite influence upon the pattern of distribution of potatoes, whether or not, in fact, such carrying be done by truck or by rail. Trucking ignores boundary lines, and has been a potent factor in creating the problem of which New Brunswick in particular has complained: the ease with which Maine potatoes can enter the only two Canadian mass-markets available to the Maritime Provinces: Toronto and Montreal. (The former is the principal outlet for Prince Edward Island potatoes; the latter, for the New Brunswick product). This ease of movement, particularly truck movement, has a direct influence upon the level of prices in Canada.

8. Geared by force of geography to reliance upon export markets—whether elsewhere in Canada, or abroad—the industry in Prince Edward Island is very greatly dependent for its continuance upon the demand at home *and* abroad for its certified seed potatoes. Loss of its seed-potato quota in the United States would be but short of disastrous for the Island and only somewhat less so for New Brunswick.

9. Historically, Canada is a net exporter of potatoes (total of seed and table-stock). Imports, entirely from the United States, are virtually all table potatoes and, as a general rule, so-called “early” or “new” potatoes, which enter chiefly in the months of May-July, inclusive. In recent years, the inward movement has shown a tendency to spread marginally (before May and beyond July).

10. While no rigid generalization can be made, because of occasional and quite abnormal variations from the rule, such imports of table potatoes from the United States as do occur, appear to be attracted to this market by higher domestic prices, which in turn frequently reflect a short-crop in Canada. So-called “new potatoes”—imported into this country during the spring and early-summer months—command a premium because they *are* new; and probably would enter whether or not they faced a customs duty at the border.

11. The major concern of Canadian growers is the impact on domestic prices in those years when the United States product is in over-supply.

H. B. McKINNON

F. J. LEDUC

W. W. BUCHANAN

APPENDIX

Schedule A—List of Appearances

Schedule B—History of Canadian Customs Tariff

Schedule C—History of United States Customs Tariff

Schedule D—Tariffs, etc. in certain other Countries

Schedule E—Precis of Marketing Legislation

Schedule F—Federal Grading and Inspection Requirements

Schedule G—

Table No.	XX—Yields of Potatoes, by States
" "	XXI—Production of Seed, by Provinces
" "	XXII—Farms and Acreages, Border Areas
" "	XXIII—Rail Movements of Potatoes
" "	XXIV—Imports of Potatoes, by Months
" "	XXV—Imports of Potatoes, by Provinces
" "	XXVI—Exports, Table Potatoes, by Months
" "	XXVII—Exports, Seed Potatoes, by Months
" "	XXVIII—Consumption, Canada and United States
" "	XXIX—Processed Potatoes

SCHEDULE A

List of persons who entered appearances at the public hearing by the Tariff Board on Reference No. 117— June 13 and 14, 1955

Name	Place	Representing
Ted Sundal.....	Taber, Alta.....	Alberta Irrigation Projects Association
Miss M. I. Dunbabin.....	} Ottawa.....	Agriculture, Department of
W. L. Porteous.....		
E. Gilmore.....		
R. Stockton.....	Vancouver, B.C.....	B.C. Coast Vegetable Marketing Board
R. Stockton.....	Kamloops, B.C.....	B.C. Interior Potato Marketing Board
Mrs. H. E. Vautelet, C.B.E.....	Ottawa.....	Canadian Association of Consumers
Dr. E. C. Hope.....	Ottawa.....	Canadian Federation of Agriculture
L. F. Burrows.....	} Ottawa.....	Canadian Horticultural Council
W. R. Shaw.....		
L. R. Stephens.....		
J. R. Burns.....		
Robert A. Murray.....	Fort Erie, Ont.....	Canadian Potato Chip Association
C. A. Annis.....	Ottawa.....	Finance, Department of
Armand Turpin.....	Hull, P.Q.....	Hawkins, W. T. Ltd., Tweed, Ont.
H. C. Greenlaw.....	} Millville, N.B.....	New Brunswick Potato Shippers' Association
Fred McCain.....		
H. B. Grandlemire.....	Hartland, N.B.....	New Brunswick Potato Industry
G. E. Finley.....	Amherst, N.S.....	Nova Scotia Federation of Agriculture
R. E. Goodin.....	Toronto, Ont.....	Ontario Department of Agriculture
M. M. Robinson.....	Toronto, Ont.....	} Ontario Fruit and Vegetable Growers' Association
Charles Huffman.....	Harrow, Ont.....	
Thomas S. Keilty.....	Thomasburg, Ont.....	} Ontario Potato Growers' Association
Clifford Smith.....	Ridgetown, Ont.....	
J. M. Darby.....	Waverley, Ont.....	Ontario Soil and Crop Improvement Association
F. W. Pirie, Jr.....	Grand Falls, N.B.....	Pirie, F. W., Co. Ltd.
W. J. Callaghan.....	Ottawa.....	Prince Edward Island Federation of Agriculture
		Potato Dealers' Association
		Potato Industry Promotion Committee
		Potato Marketing Board
		Potato Producers Association
Elric Campbell.....	Charlottetown, P.E.I.....	P.E.I. Potato Dealers' Association
Donald G. MacDonald.....	Charlottetown, P.E.I.....	P.E.I. Potato Marketing Board
J. Lincoln Dewar.....	Charlottetown, P.E.I.....	P.E.I. Federation of Agriculture
W. L. McGillivray.....	Coaldale, Alta.....	Southern Alberta Seed Growers' Association
Leon B. Rideout.....	Grand Falls, N.B.....	Valley Co-Operative Ltd.
Walter E. Kroeker.....	} Winnipeg, Man.....	Vegetable Growers' Association of Manitoba
W. Daman.....		
Manitoba Farmers Union.....	Winnipeg, Man.....	
Norfolk-Haldimand Potato Growers' Association.....	Simcoe, Ont.....	

SCHEDULE B

History—Canadian Customs Tariff

Potatoes

B.P. —British Preferential Tariff
M.F.N.—Most-Favoured-Nation Tariff
Gen. —General Tariff

	<i>B.P.</i>	<i>M.F.N.</i>	<i>Gen.</i>
1906—November 30th			
Item 83 Potatoes, n.o.p. per bushel.....	12½¢	17½¢	20¢
1918—November 7th			
Tariff change by Order in Council—War Measures Act.			
Item 83 Potatoes, including potatoes, dried, desiccated or otherwise prepared.....	Free	Free	Free
1919—June 6th			
Item 83 Potatoes, n.o.p. and potatoes dried, desiccated, or otherwise prepared, n.o.p.	Free	Free	Free
Item 83(a) Potatoes when imported from a country which imposes a customs duty on potatoes grown in Canada per bushel.....	12½¢	20¢	20¢
(Duty on U.S. potatoes entering Canada—20¢, under Item 83(a)).			
1923—May 12th			
Item 83(a) Potatoes when imported from a country which imposes a customs duty on potatoes grown in Canada, per 100 lbs.....	20¢	35¢	35¢
(Duty on U.S. potatoes entering Canada—35¢ under Item 83(a)).			
1930—May 2nd			
Item 83 Potatoes including sweet potatoes.			
(a) In their natural state.....	Free	Free	Free
Provided, that if any country imposes a duty on potatoes grown or processed in and imported from Canada, an equal duty shall be imposed on potatoes coming into Canada from such country.			
(Duty on U.S. potatoes entering Canada—75¢ per cwt. under Item 83).			
1930—September 17th			
Item 83 Potatoes as hereunder defined:			
(a) In their natural state, per cwt.....	Free	Free	75¢
(Potatoes imported from the U.S. dutiable under General Tariff).			
1931—June 2nd			
Item 71(d) Seed potatoes imported for use exclusively for propagation purposes, under regulations by the Minister.....	Free	Free	Free
(Previously dutiable under Item 83(a)).			
1936—January 1st			
Canada-United States Trade Agreement 1935.			
U.S. entitled to M.F.N. Tariff—			
(Duty on U.S. Table Potatoes entering Canada—January 1 to May 2—Free).			
1936—May 2nd			
Item 83 Potatoes as hereunder defined:			
(a) In their natural state, per cwt.....	Free	Free	75¢
Provided that if any foreign country imposes on such goods, the produce of the Dominion of Canada duties or charges more onerous than are prescribed by this item, duties equivalent thereto shall be imposed on the like goods imported into Canada from such country.			
(During the years 1936, 1937, 1938, U.S. Table Potatoes entering Canada were dutiable at 75¢ per cwt.).			

SCHEDULE B—*Con.*

1939—January 1st

Canada-United States Trade Agreement 1938.

Item 83 Potatoes, as hereunder defined:

(a) In their natural state:

August 1st to June 14th, inclusive.....	Free
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June 15th to July 31st, inclusive. per cwt.....	37½¢
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(Potatoes from United States entered under M.F.N. Tariff).

1948—January 1st

Under the General Agreement on Tariffs and Trade.

Item 83 Potatoes, as hereunder defined:

(a) In their natural state:

August 1st to June 14th, inclusive.....	Free
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June 15th to July 31st, inclusive. per cwt.....	37½¢
---	------

1950—March 29th

Item 83 Potatoes, as hereunder defined:

(a) In their natural state:

August 1st to June 14th, inclusive. per cwt.....	Free	Free	75¢
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June 15th to July 31st, inclusive. per cwt.....	Free	37½¢	75¢
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SCHEDULE C

United States Tariff History White or Irish Potatoes (Ex Par. 771)

June 18th, 1930

White or Irish Potatoesper 100 pounds, 75 cts.

September 3rd, 1934

Under the Cuban Reciprocal Trade Agreement:

White or Irish Potatoes (other than certified seed potatoes) entered for consumption during the period from December 1st in any year to the last day of the following February, inclusive

Maximum.....30 cents per 100 lbs.

Minimum.....50 per cent.

January 1st, 1936

Under the Canada-United States Trade Agreement signed at Washington November 15, 1935:

771 White or Irish seed potatoes, certified by a responsible officer or agency of a foreign Government in accordance with the official rules and regulations of that Government to have been grown and approved especially for use as seed, in containers marked with the foreign Government's official certified seed potato tags, when entered for consumption during the period
From December 1 to the last day of the following February, inclusive, in any year.....60 cents per 100 lbs.
From March 1 to November 30, inclusive, in any year.....45 cents per 100 lbs.
Provided, that such potatoes entered for consumption in excess of an aggregate quantity of 750,000 bushels of 60 pounds each in the twelve-month period beginning on December 1 in any year shall not be subject to this provision. (Above 750,000 bushels, the ex-quota rate of 75 cts. applied.)

January 1st, 1939

Under the Canada-United States Trade Agreement signed at Washington, November 17, 1938:

White or Irish Seed Potatoes, certified by a responsible officer or agency of a foreign government in accordance with the official rules and regulations of that government in containers marked with the foreign government's official certified seed potato tags, when entered for consumption during the period

From March 1 to November 30, inclusive, in any year (per 100 lbs.)..... 37½ cts.

From December 1 in any year to the last day of the following February, inclusive (per 100 lbs.) 60 cts.

Provided, that if and when the United States is no longer obligated to accord to such potatoes produced in the Republic of Cuba a preferential reduction in the rate of duty in excess of 20 per centum, the rate of duty under this item during the entire year shall be per 100 lbs. 37½ cts

Provided further, that such potatoes entered for consumption in the 12-month period beginning on September 15 in the year 1938 or any subsequent year in excess of an aggregate quantity of 1,500,000 bushels of 60 pounds each shall not be entitled to a reduction in duty by virtue of this item, but the rate of duty thereon shall not exceed per 100 lbs. 75 cts.

White or Irish Potatoes, other than certified seed potatoes, as defined in the preceding item, when entered for consumption during the period

From March 1 to November 30, inclusive, in any year (per 100 lbs.) 37½ cts.

From December 1 in any year to the last day of the following February, inclusive (per 100 lbs.) 60 cts.

Provided, that such potatoes entered for consumption in the 12-month period beginning on September 15 in the year 1938 or any subsequent year in excess of an aggregate quantity of 1,000,000 bushels of 60 pounds each shall not be entitled to a reduction in duty by virtue of this item, but the rate of duty thereon shall not exceed per 100 lbs. 75 cts.

Provided further, that if for any calendar year the production of White or Irish potatoes, including seed potatoes, in the United States, according to the estimate made as of September 1 by the United States Department of Agriculture is less than 350,000,000 bushels of 60 pounds each, an additional quantity of such potatoes, other than certified seed potatoes, equal to the amount by which such estimated production is less than 350,000,000 bushels may be entered for consumption during the 12-month period beginning on September 15 of that year at the reduced rates above specified.

And provided further, that in computing the quantities of imports specified in the two foregoing provisos White or Irish Potatoes produced in the Republic of Cuba shall not be included.

January 1st, 1948

Under the General Agreement on Tariffs and Trade signed at Geneva, October 30, 1947:

White or Irish Seed Potatoes, certified by a responsible officer or agency of a foreign government in accordance with the official rules and regulations of that government to have been grown and approved especially for use as seed, in containers marked with the foreign government's official certified seed potato tags (per 100 lbs.) 37½ cts.

Provided, that the quantity of such potatoes entitled to entry at such rate of duty shall not exceed—for the period from January 1 to September 14, inclusive, in 1948, 2,500,000 bushels of 60 pounds each, less the quantity of such potatoes entered and subject to duty at a tariff quota rate during the period from September 15 to December 31, inclusive, in 1947, or for any 12-month period beginning on September 15 in 1948 or any subsequent year, 2,500,000 bushels of 60 pounds each; and any such potatoes not subject to that rate of duty shall be dutiable at (per 100 lbs.) 75 cts.

White or Irish Potatoes, other than certified seed potatoes, as defined in the preceding item (per 100 lbs.) 37½ cts.

Provided, that the quantity of such potatoes entitled to entry at such rate of duty shall not exceed—

for the period from January 1 to September 14, inclusive, in 1948, 1,000,000 bushels of 60 pounds each, less the quantity of such potatoes entered and subject to duty at a tariff quota rate during the period from September 15 to December 31, inclusive, in 1947, or for any 12-month period beginning on September 15 in 1948 or any subsequent year, 1,000,000 bushels of 60 pounds each;

and any such potatoes not subject to that rate of duty shall be dutiable at (per 100 lbs.) 75 cts.

Provided further, that if for any calendar year the production of White or Irish potatoes, including seed potatoes in the United States, according to the estimate made as of September 1 by the United States Department of Agriculture, is less than 335,000,000 bushels of 60 pounds each, an additional quantity of such potatoes, other than certified seed potatoes, equal to the amount by which such estimated production is less than 335,000,000 bushels may be entered during the 12-month period beginning on September 15 of that year at (per 100 lbs.) 37½ cts.

Provided further, that in computing the quantities of imports specified in the two foregoing provisos White or Irish potatoes produced in the Republic of Cuba shall not be included.

White or Irish Potatoes, other than certified seed potatoes, when imported from Cuba and entered during the period from December 1, in any year, to the last day of the following February, inclusive (per 100 lbs.) 30 cts.

SOURCE: Department of Finance

SCHEDULE D

Tariffs and Restrictions on
Table and Seed Potatoes—Other Countries

UNITED KINGDOM

	Preferential Rate (accorded to Commonwealth and Empire)	Full Rate (applicable to foreign countries)
<i>Potatoes:</i>		
From July 1 to August 31	Free	2s. cwt.
From September 1 to May 15	Free	1s. cwt.
From May 16 to June 30:		
New Potatoes	Free	9s.4d. cwt.
Other	Free	1s. cwt.
Cwt. = 112 lbs.		
Seed potatoes, if not includible under foregoing item, would apparently be classified as "agricultural seeds other than grain, beans and peas", on which the rates are	Free	10% ad val.
The Importation of Plants Order 1955, which came into operation on April 1st, 1955, among other things, prohibits the landing in England or Wales of "potatoes for any purpose whatsoever from the American Continent". A similar Order is in force in Scotland (and presumably also in Northern Ireland). In so far as North American potatoes are concerned, these Orders continue prohibitions which have been in effect for many years.		

REPUBLIC OF IRELAND

Item No.	Preferential Rate	Full Rate
256 Potatoes, per cwt. (The Official Import List of the Republic of Ireland shows that potatoes for planting, as well as table potatoes, to be dutiable under this item)	£1.1s.	£1.8s.

Preference Conditions—

The preferential rate is accorded to potatoes consigned to the Republic of Ireland from Canada (or the United Kingdom) and shown to have been grown in Canada (or the United Kingdom).

Products of all countries outside the British Commonwealth are subject to the full rate.

"Ordinary Licensing" Provision—

There is an "Ordinary Licensing" provision in the tariff under which, if the Minister of Finance after consultation with the Minister for Agriculture thinks proper, the Revenue Commissioners may by licence and subject to such conditions as they may impose, authorize importation by any particular person of specified articles, including potatoes, either without payment of duty, or as regards products of countries other than Canada or the United Kingdom, at a reduced rate of duty.

Payments Abroad (Import) Permits—

Release of exchange for the payment for imports into the Republic of Ireland from countries outside the sterling area is allowed only on presentation by the importer of a Payments Abroad (Import) Permit, granted by the Irish Department of Finance. The usual procedure is for the Irish importer to ask his overseas supplier for a pro forma invoice for use as a basis for his application for exchange, the order being confirmed to the exporter when the permit is granted.

Plant Restrictions—

Under the Colorado Beetle Order, 1945, and the Foot and Mouth Disease (Importation of Plants) Order, 1952, plants are prohibited to be imported except under licence. For the purpose of these Orders plants includes....raw vegetables (including potatoes, potato haulms and leaves).

Persons proposing to import plants should obtain in advance, a licence from the Department of Agriculture. Plants imported without being licensed will be destroyed or returned to the sender.

FRANCE

Canadian potatoes are subject to the rates of duty of the French Minimum Tariff which are also accorded to imports from the Netherlands, Poland, Spain, the United Kingdom and most other important trading countries.

Ad valorem duties are levied on the c.i.f. value.

<i>Item No.</i>	<i>Minimum Tariff</i>
67-E Potatoes:	
Seed, admitted within the limits of quota fixed annually by the Minister of Agriculture and subject to conditions as follows—the reduced rate of duty is subject to the surrender to the Customs of an authorization visaed by the Minister of Agriculture. For the crop year 1954-55, ending May 31, 1955, the quota was fixed by Resolution of October 27, 1954. The authorizations are valid up to May 31, 1955, their validity not being subject to extension in any case.	5% ad val.
Table: from July 1 to February 29th, inclusive	25% ad val.
from March 1 to June 30 of the previous year	25% ad val.
from March 1 to June 30, new potatoes	30% ad val.

In addition to the above quoted duties, there is levied a combined tax amounting to 20% of the duty-paid value.

Import Control—

An import licence is required for all imports from Canada.

WESTERN GERMANY

The rates of duty quoted in this statement are taken from the official customs tariff of the Federal Republic of Germany amended to February 7th, 1955.

<i>Item No.</i>	<i>Rate of Duty Applicable to all Countries</i>
07-01 Vegetable and pot-herbs, fresh or chilled:	
F. Potatoes	ad val. 35 per cent
ex) From August 1 to May 31 ad val.	20 per cent
ex) From June 1 to June 30 ad val.	30 per cent
ex) Early potatoes, classes A and B, recognized as seed potatoes, subject to the submittal of certificates to be determined by the Federal Government ad val.	10 per cent

In addition to the above rates of duty, potatoes imported into Western Germany are also subject to a sales tax of 4 per cent of their duty-paid value. A similar tax applies to potatoes grown in Western Germany.

Import Control—

Table and seed potatoes may be imported into Western Germany only on the basis of import licences. In addition, an official sanitary certificate from the Department of Agriculture is required. Before the war, the importation of potatoes into Germany from the American Continent was prohibited by a German law of 1875 because of Colorado beetle. German plant regulations of the post-war period do not refer to the law of 1875 and it appears that permission to import Canadian potatoes might be granted subject to individual application.

SCHEDULE D—*Con.*

NETHERLANDS

The rates of duty quoted in this statement are taken from the customs tariff of Belgium, the Netherlands and Luxembourg amended to February 1, 1955. Belgian and Luxembourg goods entering the Netherlands are duty-free.

Item No.	Rate of Duty Applicable to all Countries Outside Benelux	
49 Potatoes:		
(a) New potatoes imported from January 1 to May 25, both inclusive .....ad val.....		5 per cent
(b) Seed potatoes:		
1. Imported from October 1 to the last day of February both inclusive, up to a quantity not in excess of 10,000 metric tons per period for the whole Benelux area, subject to conditions to be laid down by Minister of Finance .....ad val.....		5 per cent
2. Other .....ad val.		10 per cent
(c) Potatoes, not specifically mentioned in the tariff....ad val.		10 per cent
Potatoes are exempt from the Netherlands sales tax.		

Import Control—

Seed potatoes are admitted into the Netherlands from Canada and other dollar countries free from quantitative import restrictions. Table potatoes may only be imported subject to individual import licences. Sanitary certificates from the Canadian Department of Agriculture are required for table and seed potatoes. We are not aware of Netherlands import prohibitions of potatoes on sanitary grounds, provided they are accompanied by a valid sanitary certificate.

ARGENTINA

The rates of duty apply equally to imports from all countries. Ad valorem duty is levied on the c.i.f. value.

Item No.	Rate of Duty
183 Potatoes of all kinds, including the container	3% ad val.
184 Potatoes for sowing purposes, in boxes	free

Import Control—

All imports from Canada are subject to the prior granting of an import permit.

CUBA

Canadian products are accorded the most-favoured-nation rates of the Cuban Tariff while United States products are subject to exclusively preferential rates of duty.

The Cuban peso is worth \$1.00 United States, 100 kilograms equal 220.5 lbs.

	<i>Most-Favoured-Nation Rate</i>	<i>Rate to U.S.</i>
	(Applicable to Canada)	
<i>Item No.</i>	Pesos per 100 kilogs	Pesos per 100 kilogs
260-A Potatoes certified to be for seed, cut in pieces, with the eyes plain- ly visible, preserved in ashes or other substances, and potatoes whole or not cut in pieces, also certified, imported from Septem- ber 1st to January 31st inclusive of each year, of the varieties specified or that in the future may be specified by the Department of Agriculture, imported to be used exclusively for seed	free	free

CUBA—*Con.*

Potatoes not specifically classified
(i.e. table potatoes) imported
during—

260-B	December 1st to June 30th	\$5.00*	\$4.00
260-C	July	\$5.00*	\$3.00
260-D	November	\$4.00*	\$3.00
260-E	August, September, October	\$3.00*	\$1.00

Import Control—

Cuba has introduced quotas for seed potatoes which have not been enforced up to now. The announced quota for 1955 is 17,000,000 pounds.

URUGUAY

The rates of duty apply equally to imports from all countries. Ad valorem duties are levied on the official valuation.

The Uruguayan peso is worth approximately 65 cents Canadian: Kilogram equals 2.205 pounds.

<i>Item No.</i>	<i>Rate of Duty</i>
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II-49-205	Potatoes (except seed)	
	per kilogram gross	0.02 peso
	plus—ad valorem	33 per cent
	based on Official Valuation of,	
	per kilogram gross	0.078 peso

Example:

Official Valuation of 0.078 peso per kilogram gross	
33 per cent duty, ad valorem, on 0.078 peso	0.026 peso
plus specific duty of 0.02 peso per kilogram gross	0.02 peso

Total Duty, per kilogram gross	0.046 peso
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ex II-49-205	Seed potatoes, officially certified by the country of origin	free
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NOTE:

This concession is applicable only in respect of seed potatoes imported by official Government institutions for the purpose of their distribution and use.

Import Control—

An import licence is required for all imports from Canada.

SOURCE: Department of Trade and Commerce

*In addition to the above duties, a surtax of 20 per cent of the duty is levied on Canadian potatoes. This surtax is applicable to imports of United States potatoes only from November to June inclusive. A sales tax of 6 per cent of the duty-paid value is levied on table potatoes. Seed potatoes are exempt from this sales tax.

SCHEDULE E

Marketing Legislation and Marketing Boards

Extracts from "Canadian Experiences with Marketing and Price Support Legislation" by Dr. J. F. Booth, Chief Economics Division, Marketing Services, Canada—Department of Agriculture.

The physical handling of farm products and most of the marketing functions are still in the hands of the trade, private and co-operative. Each province has legislation relating to the orderly marketing of agricultural products, although in some cases this authority has not been used or has been used to a limited extent only.

The feature common to all the provincial acts, except that of Newfoundland, is that they provide for the formation of a central marketing board, with local boards to administer schemes relating to individual products or groups of products.

By and large, these provincial acts relate to "natural products", and in practice this means natural agricultural products although several of the acts have been broadened to include a wide range of eligible products including, in the case of Alberta, for instance, products of oil and gas wells, mines and quarries.

The local boards, or boards established under a scheme or act to regulate a given product, are normally granted powers: (a) to require registration and licensing of persons dealing with the regulated product (b) to fix and collect licence fees or other charges (c) to regulate marketing, packing, storing, distributing, transporting, and grading the product (d) to fix prices (e) to conduct enquiries, settle disputes (f) to co-operate with boards or agencies of Federal or other provincial governments and (g) various other powers and variations of those outlined.

Most provinces provide for the establishment of "schemes", which may be put into effect in various ways, but which usually involve a plebiscite of producers to ensure their approval.

The marketing of potatoes has been under control of provincial marketing boards in only three provinces:

- (a) Potato Marketing Board—Prince Edward Island.
Regulating potatoes produced in the Counties of Kings, Queens and Prince—established in 1950.
- (b) New Brunswick Potato Marketing Board.
Regulating potatoes produced in New Brunswick—established in 1951.
- (c) British Columbia Coast Vegetable Marketing Board.
Regulating potatoes and other vegetables grown in the designated area of British Columbia—(Lower Mainland and Vancouver Island)—established in 1934.
- (d) British Columbia Interior Vegetable Marketing Board.
Regulating vegetables of all kinds, including potatoes, produced in the designated area of British Columbia—established in 1934.

Federal Marketing Legislation:

Boards or schemes operating under provincial legislation have no authority over the regulated product extending beyond the area designated in the scheme, certainly not beyond the province.

However, the *Agricultural Products Marketing Act 1949* empowers the Governor-in-Council to grant to any board operating under provincial marketing law, powers in inter-provincial and export trade similar to those which it exercises within the province. A provincial board may apply for extension of specified powers, which, if approved, may be granted to it by Order-in-Council.

All four Potato Marketing Boards, listed above, have sought and obtained extensions of their powers in respect of the marketing of potatoes in interprovincial and export trade, under the provisions of this Act.

The *Agricultural Products Co-operative Marketing Act of 1939* provides for Federal financial assistance for producers operating pools for the orderly marketing of their products. Under certain conditions, the Act authorizes a maximum initial guarantee of 80 per cent of the average selling price of the preceding three years, thus enabling the producers' selling agency to obtain bank loans sufficient to cover agreed initial payments. Selling agencies for provincial marketing boards qualify for assistance under this Act, provided they operate on a co-operative plan. The Prince Edward Island and New Brunswick Potato Marketing Boards had agreements under this Act covering the 1950 and 1953 crops.

The operations under the *Agricultural Prices Support Act of 1944*, in so far as they relate to marketing boards, have been confined to certain government guarantees given, or purchases made, to support prices. On the 1950 potato crop, there was a joint operation

under this Act and the Agricultural Products Co-operative Marketing Act to provide assistance in the marketing of potatoes by the Prince Edward Island and New Brunswick Potato Marketing Boards. The manner in which this agreement was operated is described in the following section:

The Prince Edward Island Marketing Scheme—

(Very little helpful information regarding the functioning of these provincial boards was provided during the public hearing; no complaints were received, nor were any suggestions made as to how the operation of the potato marketing boards might be improved. Perhaps it will serve the purposes of this study if the operations of only one of these boards is described. The Tariff Board is again indebted to Dr. J. F. Booth for providing a detailed memorandum on the Prince Edward Island scheme, from which the following paragraphs have been extracted and condensed):

Summary of Provisions:

The scheme was drawn up in 1950 and amended in 1953. It defines the regulated area as the counties of Kings, Queens and Prince, and applies to all persons who grow, pack, store, buy or sell potatoes of any kind or grade in the regulated area.

The Prince Edward Island Potato Marketing Board established under the scheme consists of six bona fide farmers, and four representatives of dealers (three non-co-operatives and one co-operative).

Under the scheme the potato board may prescribe the manner in which potatoes in the regulated area shall be marketed; designate the agency through which potatoes produced in the regulated area shall be marketed; and prohibit the buying, selling, packing, storing or transportation of potatoes produced in the regulated area which do not conform to the quality standards set by the board. The scheme specifies that there must be no buying, selling, offering for sale or otherwise dealing in potatoes in the regulated areas without a licence.

Provision is made for fixing and collecting licence fees and service charges for all persons producing, packing, transporting, storing or marketing potatoes. The board may determine the conditions upon which licensed dealers may buy, sell, transport or otherwise handle potatoes in the regulated area, and has power to cancel licences for violations of its orders and regulations.

Power is granted to fix minimum prices at which potatoes produced in the regulated area may be bought or sold in Prince Edward Island for delivery in the province.

The board is empowered to act as a co-operative association within the meaning of the Federal Agricultural Products Co-operative Marketing Act and to enter into agreements with the Federal government under the same; also to appoint any person to act as a selling agency for that purpose.

Action Under Board Orders:

The board has made 27 orders, dealing with the various marketing powers extended to it. Many of these have been revoked and two declared invalid.

Under the board orders there must be no selling or marketing on consignment and no shipping or exporting for sale on consignment.

Minimum prices to be paid to producers for specified varieties of potatoes have been fixed from time to time.

The board has entered into an agreement with the Canadian Freight Association to use only specified railway companies for the carriage of Prince Edward Island potatoes to western Quebec and Ontario, and has forbidden shipment except by these companies. The purpose of this order was to obtain the benefits of low "agreed" rates on such shipments.

Use of Powers Extended in Legislation:

The powers of the local board are wide and include most of the powers which may be granted by the authority of The Marketing Act. The scheme permits the fixing of minimum prices by variety or grade for buying and selling within the province; under the Act, there is power to fix prices, including both maximum and minimum prices for buying or selling within the province, or to be paid by designated agencies, including different prices for different parts of the province.

The local board was not given the specific power to seize and dispose of any of the regulated product kept, transported, packed, stored or marketed in violation of an order, but has the power generally, with the approval of the Prince Edward Island Marketing Board, to "do such acts not inconsistent herewith as it deems advisable for the effective carrying out of this scheme and the regulations made thereunder".

The board was at first empowered to co-operate with boards handling potatoes in other Atlantic provinces but this section of the scheme was declared invalid in a 1952 Supreme Court of Canada judgment. At the same time, Board Orders 2 and 6, imposing a levy of one cent per 100 lb. on dealers and producers, were declared invalid.

SCHEDULE E—*Con.*

Relation to Federal Legislation:

The Prince Edward Island Potato Marketing Board has been granted two extensions of authority under the Agricultural Products Marketing Act, giving it, in interprovincial and export trade, like powers to those which it exercises within the province. All the powers mentioned in the paragraphs headed "Summary of Provisions", above, have been extended so that the board has power to prescribe the manner of marketing in interprovincial and export trade, to fix minimum prices on such shipments and to make orders regarding transporting, packing, storing or marketing outside the province.

The board has also taken advantage of the authority conferred on it in the scheme to act as a co-operative association within the meaning of the Federal Agricultural Products Co-operative Marketing Act. On August 13, 1953, the Federal Minister of Agriculture was granted authority by P.C. 1953-1299 to enter into an agreement with the board in connection with the marketing of potatoes produced in the province in 1953. The agreement which both parties signed provided for separate pools for table stock and for certified seed potatoes of specified classes. It provided that growers were to be paid specified prices by the board for potatoes delivered to it. The Federal government in turn guaranteed the board these prices plus a specified maximum for handling charges. When all potatoes were sold, the board received from the Federal government the difference between the guaranteed price plus handling charges and the price at which the potatoes were sold. The guaranteed price to the growers was approximately 40 per cent of their returns for the preceding three years. The Federal government's liability amounted to nearly \$2,400,000.

On the 1950 crop, an arrangement had been made, providing for a minimum price on deliveries amounting to \$1.20 per barrel (165 lb.) for Canada No. 1 grade potatoes. This consisted of an initial advance of 60 cents per barrel, plus a maximum allowance for handling charges as provided by the Agricultural Products Co-operative Marketing Act. The advance was to be recovered through future sales, and through a deficiency payment made under the Agricultural Prices Support Act sufficient to bring the price to growers to \$1.20. Government payments on Prince Edward Island potatoes amounted to \$14,000 under the initial advance guarantee and \$68,000 under the price support legislation.

In addition to the Federal liability noted above in respect to the 1950 and 1953 agreements with the Prince Edward Island Potato Industry, payments under the New Brunswick plan cost the Federal Treasury approximately \$200,000 in re the 1950 crop and an amount in excess of \$2,500,000 in connection with the 1953 crop.

Neither the Prince Edward Island nor the New Brunswick Potato Marketing Board was in active operation during the months in which this enquiry was made.

Table Potatoes

Summary of Federal Grading & Inspection Requirements
(Interprovincial, Export & Import Trade)
The Fruit, Vegetables and Honey Act and Regulations.

GRADES:

The grades are compulsory, except stock used for processing purposes; and potatoes are subject to inspection at any time and place.

The grades, with size requirements, are as follows:

Canada Fancy	—2 $\frac{1}{4}$ " to 3 $\frac{1}{2}$ ".
Canada No. 1	—2" to 4", 75% 2 $\frac{1}{4}$ " or larger (round varieties). —1 $\frac{3}{4}$ " min., 75% 2" or larger (long varieties).
Canada No. 1 Large	—3 $\frac{1}{4}$ " and larger.
Canada No. 1 Small	—1 $\frac{1}{2}$ " to 2 $\frac{1}{4}$ " (may be exported only).
Canada No. 2	—1 $\frac{3}{4}$ " min., 75% 2" or larger.

All new potatoes (until Aug. 31 in each calendar year) in each of the grades, must be 1 $\frac{1}{8}$ " min. diameter. This is the only size requirement for new potatoes. This size for new potatoes applies to all exports, imports and interprovincial shipments.

INSPECTION:

Compulsory government inspection and certification is prescribed as follows:

1. Potatoes grown in the provinces of British Columbia, Ontario, New Brunswick, Nova Scotia and Prince Edward Island and shipped to any other province.
2. All exports.
3. All imports.

RESTRICTIONS:

Export—Canada No. 2 grade is prohibited.

Import—Must not be below Canada No. 1 grade.

An exception is made for imports from the United States by permitting U.S. No. 1 Size A (1 $\frac{1}{8}$ " min., 60% 2 $\frac{1}{4}$ " or larger—round varieties and 1 $\frac{1}{8}$ " min., 40% 6 ounces or larger—long varieties), or higher U.S. grade.

NOTE:

Provincial Regulations are, in effect, substantially the same as the Federal Regulations.

Source:

Department of Agriculture.

SCHEDULE G

Table No. XX—Yields* of Potatoes, United States—by States
1930-1955 (bushels)

	1930	1931	1932	1933	1934	1935	1936
Maine.....	250.0	258.0	238.0	280.0	324.0	240.0	285.0
New York.....	—	142.0	135.0	123.0	143.0	110.0	120.0
Pennsylvania.....	—	139.0	110.0	113.0	145.0	114.0	132.0
Michigan.....	—	95.0	115.0	78.0	112.0	87.0	95.0
Wisconsin.....	—	93.0	87.0	70.0	108.0	82.0	82.0
Minnesota.....	—	80.0	78.0	68.0	57.0	84.0	47.0
North Dakota.....	—	74.0	58.0	62.0	45.0	98.0	55.0
Colorado.....	—	95.0	110.0	150.0	84.0	180.0	185.0
Idaho.....	—	220.0	200.0	230.0	193.0	215.0	210.0
Ohio.....	—	102.0	99.0	72.0	105.0	108.0	111.0
Total Late.....	—	115.5	111.0	106.0	119.0	113.4	117.7
Total Intermed.....	—	107.4	105.9	86.1	96.9	108.5	86.6
Total Early.....	—	87.3	72.8	75.0	85.0	81.1	67.4
Total U.S.A.....	109.8	110.8	105.9	100.3	112.9	109.1	108.4
	1937	1938	1939	1940	1941	1942	1943
Maine.....	280.0	242.0	230.0	266.0	285.0	270.0	355.0
New York.....	125.0	122.0	127.0	143.0	148.0	148.0	143.0
Pennsylvania.....	123.0	114.0	120.0	125.0	130.0	112.0	106.0
Michigan.....	103.0	120.0	97.0	82.0	110.0	98.0	105.0
Wisconsin.....	73.0	90.0	88.0	74.0	91.0	67.0	88.0
Minnesota.....	103.0	90.0	85.0	95.0	73.0	95.0	97.0
North Dakota.....	105.0	85.0	85.0	115.0	105.0	135.0	130.0
Colorado.....	148.0	130.0	160.0	208.0	187.0	230.0	213.0
Idaho.....	245.0	250.0	230.0	260.0	225.0	230.0	230.0
Ohio.....	85.0	107.0	105.0	103.0	122.0	108.0	95.0
Total Late.....	132.5	129.3	129.8	138.9	142.5	148.1	152.6
Total Intermed.....	117.4	130.6	95.5	127.5	114.6	117.8	114.4
Total Early.....	84.4	89.0	84.9	103.2	95.2	104.6	103.3
Total U.S.A.....	124.2	123.8	120.3	132.0	131.2	136.9	139.5
	1944	1945	1946	1947	1948	1949	1950
Maine.....	268.0	261.0	358.0	350.0	385.0	465.0	480.0
New York.....	136.0	167.0	244.0	233.0	261.0	236.0	313.0
Pennsylvania.....	116.0	121.0	158.0	165.0	185.0	186.0	240.0
Michigan.....	108.0	110.0	123.0	105.0	150.0	165.0	180.0
Wisconsin.....	84.0	95.0	105.0	105.0	150.0	170.0	200.0
Minnesota.....	82.0	110.0	115.0	140.0	160.0	170.0	175.0
North Dakota.....	125.0	138.0	125.0	160.0	160.0	185.0	190.0
Colorado.....	225.0	195.0	230.0	250.0	275.0	285.0	325.0
Idaho.....	230.0	225.0	255.0	220.0	300.0	250.0	300.0
Ohio.....	83.0	119.0	140.0	130.0	165.0	165.0	255.0
Total Late.....	146.0	164.2	197.9	198.1	234.5	235.6	276.4
Total Intermed.....	84.7	129.8	157.6	160.7	171.8	149.0	199.5
Total Early.....	96.6	130.1	158.2	149.4	166.4	170.4	191.0
Total U.S.A.....	131.1	155.0	186.3	185.2	215.5	215.2	253.4
	1951	1952	1953	1954	1955 ¹		
Maine.....	445.0	360.0	375.0	325.0	450.0		
New York.....	274.0	287.0	291.0	295.0	308.0		
Pennsylvania.....	235.0	225.0	210.0	245.0	240.0		
Michigan.....	180.0	185.0	185.0	195.0	184.0		
Wisconsin.....	185.0	215.0	235.0	215.0	205.0		
Minnesota.....	170.0	180.0	160.0	200.0	191.0		
North Dakota.....	185.0	180.0	170.0	190.0	175.0		
Colorado.....	255.0	385.0	335.0	320.0	326.0		
Idaho.....	280.0	310.0	300.0	275.0	298.0		
Ohio.....	230.0	200.0	200.0	250.0	260.0		
Total Late.....	259.9	271.3	266.1	269.8	286.2		
Total Intermed.....	174.9	131.9	167.5	157.6	200.3		
Total Early.....	195.3	206.7	215.8	216.9	237.7		
Total U.S.A.....	240.3	249.0	249.3	252.8	271.9		

* Yield per harvested acre.

¹ United States Department of Agriculture Crop Estimate September 10, 1955.

SOURCE: Department of Agriculture (Canada)
Dominion Bureau of Statistics.

Table No. XXI—Production of Certified Seed Potatoes by Provinces: 1930-1954

(Bushels)

	1930	1931	1932	1933	1934	1935	
Prince Edward Island.....	3,776,000	4,082,000	2,255,000	2,040,000	2,734,000	1,968,000	
Nova Scotia.....	75,000	213,000	115,000	70,000	121,000	94,000	
New Brunswick.....	430,000	900,000	726,000	555,000	765,000	592,000	
Quebec.....	310,000	393,000	194,000	165,000	223,000	128,000	
Ontario.....	257,000	362,000	223,000	188,000	273,000	198,000	
Manitoba.....	50,000	78,000	47,000	47,000	35,000	32,000	
Saskatchewan.....	30,000	33,000	44,000	45,000	55,000	43,000	
Alberta.....	20,000	31,000	27,000	28,000	30,000	26,000	
British Columbia.....	52,000	94,000	47,000	46,000	59,000	44,000	
CANADA.....	5,000,000	6,186,000	3,678,000	3,184,000	4,295,000	3,125,000	
	1936	1937	1938	1939	1940	1941	
Prince Edward Island.....	2,042,000	2,610,000	2,311,000	2,362,000	2,100,000	1,798,000	
Nova Scotia.....	174,000	278,000	203,000	170,000	219,000	185,000	
New Brunswick.....	698,000	1,909,000	1,743,000	1,763,000	2,614,000	1,700,000	
Quebec.....	162,000	232,500	93,000	69,000	135,000	176,000	
Ontario.....	261,000	289,000	244,000	195,000	209,000	136,000	
Manitoba.....	49,000	42,000	33,000	3,000	12,000	26,000	
Saskatchewan.....	53,000	50,000	36,000	20,000	17,000	11,000	
Alberta.....	38,000	60,000	42,000	17,000	20,000	19,000	
British Columbia.....	40,000	55,500	61,000	75,000	125,000	104,000	
CANADA.....	3,517,000	5,526,000	4,766,000	4,674,000	5,451,000	4,155,000	
	1942	1943	1944	1945	1946	1947	
Prince Edward Island.....	1,506,000	1,245,000	2,743,000	3,745,000	5,887,000	6,100,300	
Nova Scotia.....	157,000	72,000	130,000	101,000	267,000	234,250	
New Brunswick.....	1,544,000	1,672,000	2,222,000	1,860,830	3,641,000	3,980,000	
Quebec.....	53,000	102,000	140,000	227,350	324,000	316,700	
Ontario.....	85,000	244,000	226,000	309,000	399,000	418,800	
Manitoba.....	18,000	12,000	11,000	21,210	23,000	79,000	
Saskatchewan.....	5,000	5,000	3,500	6,025	8,000	10,800	
Alberta.....	16,000	13,000	23,000	67,500	47,000	109,000	
British Columbia.....	86,000	154,000	101,000	163,125	260,000	498,150	
CANADA.....	3,470,000	3,519,000	5,599,500	6,501,040	10,856,000	11,747,000	
	1948	1949	1950	1951	1952	1953	1954
Prince Edward Island.....	5,400,000	8,276,000	5,813,850	3,496,000	4,831,000	5,219,400	5,301,092
Nova Scotia.....	216,000	244,400	320,550	197,000	219,200	198,275	171,593
New Brunswick.....	5,429,000	8,899,900	7,780,000	5,043,000	3,601,400	5,042,500	4,968,115
Quebec.....	469,000	401,200	406,850	334,000	531,000	528,000	478,115
Ontario.....	476,000	216,200	425,500	438,000	424,400	437,500	337,545
Manitoba.....	68,000	51,950	90,950	86,000	69,800	106,025	71,750
Saskatchewan.....	9,000	14,200	11,740	9,000	7,000	9,800	11,150
Alberta.....	87,000	138,750	146,350	139,000	111,100	180,125	137,210
British Columbia.....	558,000	558,500	899,800	428,000	529,100	799,400	522,234
CANADA.....	12,712,000	18,801,100	15,895,790	10,170,000	10,324,000	12,521,025	11,998,804

SOURCE: Department of Agriculture.

Table No. XXII—Area, Number of Farms, Average Harvested Acreage of Potatoes in Selected Potato-growing States Along Canada—United States Border—1949

	United States	Maine	New York	Michigan	Wisconsin	Minnesota	North Dakota	Idaho	Washington
Acreage.....	1,607,747	143,726	113,003	85,477	59,451	90,788	103,084	144,629	27,442
No. Farms.....	1,649,906	14,904	37,938	49,605	56,543	54,928	24,170	12,048	8,913
Average per Farm.....	0.97	9.6	2.9	1.7	1.0	1.6	4.3	12.0	3.0

SOURCE: United States Department of Agriculture—Summary of 1950 Census.

Area, Number of Farms and Average Seeded Acreage in Potatoes in Canada—1951

	Canada	New-found-land	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
Acreage.....	287,570	2,505	29,607	11,331	38,123	92,024	54,894	15,846	15,709	17,730	9,792
No. Farms.....	366,118	3,224	8,297	18,604	20,004	95,796	64,951	33,925	66,767	46,116	8,430
Average per Farm.....	0.78	0.77	3.56	0.6	1.9	0.96	0.84	0.46	0.23	0.38	1.1

SOURCE: Dominion Bureau of Statistics—Census of Canada 1951, Vol. VI Pt. 1.

Table No. XXIII—Interprovincial Rail Movement of Potatoes in Canada, Crop Years 1949-50 to 1953-54, as Indicated by Carlot Destinations
 (% of total rail shipments received in each province from other provinces)

Newfoundland	Prince Edward Island	Nova Scotia	New Brunswick	Quebec	Ontario	Manitoba	Saskatchewan	Alberta	British Columbia
P.E.I..... 85.4	P.E.I..... 99.2 ¹	P.E.I..... 83.1 ²	N.B..... 51.7 ¹	N.B..... 77.8	P.E.I..... 51.6	Alta..... 24.5	Alta..... 58.9	Alta..... 54.8 ¹	B.C..... 60.6 ¹
N.B..... 8.2	N.B..... 0.5	N. B..... 10.8	P.E.I..... 41.9 ²	P.E.I..... 18.1	N.B..... 44.2	Ont..... 23.4	Man..... 16.8	B.C..... 35.6	Alta..... 36.9
Ont..... 3.9	Ont..... 0.3	Ont..... 4.5	Ont..... 3.5	Que..... 2.7 ¹	Ont..... 3.0 ¹	Man..... 17.7 ¹	B.C..... 14.4	P.E.I..... 4.9	P.E.I..... 1.8
N.S..... 2.3	N.S..... 1.5 ¹	N.S..... 2.2	N.S..... 0.7	Ont..... 1.4	Man..... 0.8	P.E.I..... 17.4	Ont..... 4.7	Man..... 2.9	Man..... 0.4
Que..... 0.2	Que..... 0.1	Man..... 0.1	Man..... 0.7	Alta..... 6.0	N.B..... 0.3	N.B..... 5.5	Que..... 2.5	Que..... 0.2	N.B..... 0.2
					B.C..... 5.2	P.E.I..... 2.2	Ont..... 0.1	N.S..... 0.1	
					Sask..... 0.5 ¹	Sask..... 0.5 ¹			
					Que..... 0.2	Que..... 0.2			
					N.S..... 0.1	N.S..... 0.1			

¹ "intra" provincial
² For reshipment

Source: Markets Information Service, Department of Agriculture

SCHEDULE G—Con.

Table No. XXIV—Imports of Table Potatoes by Months (Cwt.) 1930-1955

	1930		1931		1932		1933		1934		1935	
	Total	From U.S.A.	Total	From U.S.A.	Total	From U.S.A.	Total	From U.S.A.	Total	From U.S.A.	Total	From U.S.A.
January.....	16,201	16,142	309	295	151	151	227	82	420	227	205	202
February.....	49,533	49,505	640	606	366	361	466	243	293	246	704	702
March.....	40,724	40,720	6,841	6,650	1,954	1,954	1,152	1,143	2,315	1,858	1,491	1,348
April.....	22,801	22,474	10,672	10,450	3,765	3,765	4,583	4,580	6,033	5,248	1,939	1,387
May.....	44,431	44,382	23,408	22,720	9,302	8,263	24,571	15,686	19,620	12,072	26,541	17,899
June.....	165,134	164,782	98,142	97,793	54,814	52,380	62,586	59,741	63,141	62,215	57,448	57,446
July.....	162,459	162,451	56,130	56,125	42,066	41,293	13,706	13,694	32,035	32,013	15,876	15,870
August.....	3,106	3,073	495	473	59	59	.....	.....	10	4	462	457
September.....	179	159	65	65	43	43	27	27	4	4	40	40
October.....	275	266	83	78	73	73	20	16	17	12	13	13
November.....	337	337	544	539	67	66	324	324	17	13	68	68
December.....	1,013	1,005	123	123	117	57	90	81	86	81	87	81
TOTAL.....	506,193	505,296	197,452	195,917	112,777	108,465	107,752	95,622	123,991	113,999	104,874	95,513

	1936		1937		1938		1939		1940		1941	
	Total	From U.S.A.	Total	From U.S.A.	Total	From U.S.A.	Total	From U.S.A.	Total	From U.S.A.	Total	From U.S.A.
January.....	1,043	381	604	547	617	510	2,111	2,103	17,314	17,314	11,276	11,276
February.....	2,857	2,825	1,078	952	2,170	1,236	3,827	3,713	23,187	23,081	19,049	19,029
March.....	9,015	8,236	3,382	2,655	4,408	4,408	11,491	11,491	39,405	39,374	21,290	21,290
April.....	10,109	10,061	4,903	4,493	9,891	9,504	15,364	15,357	57,674	57,649	38,153	38,153
May.....	29,699	29,023	23,929	21,806	50,587	49,579	107,410	107,043	103,298	102,671	91,026	91,026
June.....	58,971	58,219	83,514	83,252	89,401	89,401	377,442	377,385	145,926	145,880	123,702	123,702
July.....	17,755	17,375	30,247	30,247	7,660	7,660	72,291	72,291	110,985	110,985	4,206	4,206
August.....	133	133	64	64	90	90	23,716	23,716	3,755	3,755	351	351
September.....	4	4	56	56	37	37	6,758	6,758	2,647	2,647	369	369
October.....	146	138	119	119	250	250	3,080	3,080	41,025	41,025	4,245	4,245
November.....	176	174	176	104	889	889	8,427	8,427	35,215	35,215	16,394	16,394
December.....	287	279	482	472	405	402	2,915	2,911	17,253	17,007	1,548	1,548
TOTAL.....	130,195	126,848	148,554	144,763	166,405	163,966	634,832	634,273	597,684	596,603	331,609	331,589

Table No. XXIV—Imports of Table Potatoes by Months (Cwt.) 1930-1955—(concluded)

	1942			1943			1944			1945			1946			1947			1948		
	Total	From U.S.A.	Total	Total	From U.S.A.	Total	Total	From U.S.A.	Total	Total	From U.S.A.	Total	Total	From U.S.A.	Total	Total	From U.S.A.	Total	From U.S.A.	Total	
January.....	631	631	7,094	7,094	7,094	348	348	348	.....	.....	.....	307,392	307,392	371,423	2,076	2,076	.....	12	12	.....
February.....	1,830	1,830	8,166	8,166	8,166	5,215	5,215	5,215	.....	.....	.....	371,423	371,423	784,958	1,488	1,488	.....	.....	.....	.....
March.....	10,564	10,564	8,316	8,316	8,316	108,809	108,809	108,809	.....	.....	.....	784,958	784,958	6,703	6,703	6,703	.....	384	384	384
April.....	19,929	19,929	4,140	4,140	4,140	27,963	27,963	27,963	9,098	9,098	249,929	249,929	217,349	217,349	27,474	27,474	27,474	20,622	20,622	20,622	
May.....	80,293	80,293	6,956	6,956	6,956	65,072	65,072	65,072	.....	.....	249,929	249,929	483,937	483,937	177,487	177,487	177,487	111,142	111,142	111,142
June.....	218,640	218,640	42,372	42,372	42,372	123	123	123	108,904	108,904	108,904	127,798	127,798	115,798	157,985	157,985	157,985	70,409	70,409	70,369	
July.....	39,214	39,214	528,455	528,455	528,455	123	123	123	25,893	25,893	25,893	18,449	18,449	18,449	3,837	3,837	3,837	360	360	360	
August.....	709	709	25,197	25,197	25,197	800	800	800	2,970	2,970	2,970	155	155	155	7,010	7,010	7,010	.....	.....	.....
September.....	13,866	13,866	91	91	91	230	230	230	19,566	19,566	19,566	3,100	3,100	3,100	1,640	1,640	1,640	.....	.....	.....
October.....	10,800	10,800	8	8	8	.....	.....	.....	440,212	440,212	440,212	538	538	538	209	209	209	.....	.....	.....
November.....	3,571	3,571	1,012	1,012	1,012	.....	.....	.....	1,071,003	1,071,003	1,071,003	2,908	2,908	2,908	.....	.....	.....	.....	.....	.....
December.....	2,779	2,779	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
TOTAL.....	402,856	402,845	631,807	631,807	631,807	208,932	208,932	208,932	1,987,605	1,987,605	1,987,605	3,257,811	3,245,753	385,935	385,935	385,935	202,929	202,929	202,832	202,832	

	1949			1950			1951			1952			1953			1954			1955		
	Total	From U.S.A.	Total	Total	From U.S.A.	Total	Total	From U.S.A.	Total	Total	From U.S.A.	Total	Total	From U.S.A.	Total	Total	From U.S.A.	Total	From U.S.A.	Total	
January.....	30	30	10,806	10,806	10,806	6,538	6,538	6,538	173,140	173,140	173,140	3,797	3,797	3,797	22,060	22,060	.....	177,001	177,001	
February.....	.....	.....	35,809	35,809	35,809	9,517	9,517	9,517	194,974	194,974	194,974	13,323	13,323	13,323	23,608	23,608	.....	156,043	156,043
March.....	.....	.....	53,720	53,720	53,720	18,188	18,188	18,188	279,037	279,037	279,037	49,123	49,123	49,123	50,217	50,217	.....	211,734	211,734
April.....	777	777	79,548	79,548	79,548	26,552	26,552	26,552	331,777	331,777	331,777	127,050	127,050	127,050	93,711	93,711	.....	260,452	260,452	
May.....	61,378	61,378	152,696	152,696	152,696	99,963	99,963	99,963	319,199	319,199	319,199	287,219	287,219	287,219	228,799	228,799	.....	375,908	375,908	
June.....	211,244	211,244	326,005	326,005	326,005	257,125	257,125	257,125	426,450	426,450	426,450	503,240	503,240	503,240	419,246	419,246	.....	546,101	546,101	
July.....	35,486	35,486	235,881	235,881	235,881	79,346	79,346	79,346	287,152	287,152	287,152	270,096	270,096	270,096	220,306	220,306	.....	259,350	259,350	
August.....	1,803	1,803	15,603	15,603	15,603	22,660	22,660	22,660	24,417	24,417	24,417	36,703	36,703	36,703	115,024	115,024	.....	.....	.....
September.....	609	609	14,275	14,275	14,275	15,030	15,030	15,030	14,028	14,028	14,028	27,569	27,569	27,569	120,079	120,079	.....	.....	.....
October.....	483	483	24,400	24,400	24,400	14,125	14,125	14,125	15,085	15,085	15,085	19,397	19,397	19,397	231,216	231,216	.....	.....	.....
November.....	4,032	4,032	10,985	10,985	10,985	92,606	92,606	92,606	40,358	40,358	40,358	16,941	16,941	16,941	401,006	401,006	.....	.....	.....
December.....	9,171	9,171	6,722	6,722	6,722	52,208	52,208	52,208	10,885	10,885	10,885	16,655	16,655	16,655	110,421	110,421	.....	.....	.....
TOTAL.....	325,009	324,906	967,140	967,140	967,140	693,858	693,783	693,783	2,176,592	2,176,592	2,176,592	1,361,023	1,360,618	2,035,883	2,035,883	

SOURCE: Dominion Bureau of Statistics

Table No. XXV—Potatoes—Imports by Province (cwt.)

	N.S.	P.E.I.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.	Total	Value \$
1945.....	34,488	.....	28,146	622,819	1,003,080	118,923	101,404	14,897	63,848	1,987,605	4,894,743
1946.....	63,117	.....	34,558	655,927	1,507,821	270,250	192,522	133,240	400,626	3,257,761	6,829,414
1947.....	1,580	.....	884	80,351	185,996	24,621	12,568	18,951	60,346	385,297	1,180,428
1948.....	97	.....	.....	34,031	66,631	2,684	.....	1,840	97,644	202,927	1,349,477
1949.....	2,466	.....	550	47,995	119,048	32,440	17,722	34,831	69,955	325,007	873,125
TOTAL.....	101,748	.....	64,138	1,441,123	2,882,276	448,918	324,216	203,759	692,419	6,158,597	14,097,187
5 year average.....	20,350	.....	12,828	288,225	576,455	89,784	64,843	40,752	138,484	1,231,719	2,819,437
1950.....	3,226	.....	5,975	131,014	306,867	116,759	81,932	76,931	244,434	967,128	2,185,165
1951.....	2,888	.....	14,967	101,598	256,984	41,281	18,430	33,250	224,401	693,799	2,138,881
1952.....	6,050	.....	663,942	435,041	574,151	106,397	31,509	52,337	306,956	2,176,383	8,847,524
1953.....	4,313	117	232,324	219,556	431,243	122,242	36,669	48,346	265,704	1,360,494	2,630,026
1954.....	5,230	140	237,855	319,134	530,703	284,811	92,869	96,097	468,574	2,035,413	4,667,635
TOTAL.....	21,707	257	1,155,063	1,206,323	2,099,948	671,490	261,409	306,961	1,510,069	7,233,217	20,469,231
5 year average.....	4,341	51	231,012	241,264	419,989	134,298	52,281	61,392	302,013	1,446,643	4,093,846

SOURCE: Dominion Bureau of Statistics.

Table No. XXVI—Exports of Table Potatoes by Months—Total and to the United States (Bushels) 1930*—1955

	1930*		1931*		1932*		1933*		1934*		1935*	
	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.
January.....	720,278	500,326	380,701	248,351	315,749	17,000	148,318	16,266	158,542	43,942	130,488	7,519
February.....	612,043	527,748	431,844	375,317	104,154	36,228	32,382	3,790	263,396	173,915	71,701	32,029
March.....	719,408	653,766	1,213,615	1,140,103	194,143	65,799	234,188	172,206	775,983	753,295	84,905	29,435
April.....	728,365	712,048	1,142,804	1,101,948	207,539	159,170	101,365	69,900	171,051	158,306	68,775	24,422
May.....	440,476	416,356	861,620	759,743	504,772	364,938	91,219	10,792	92,581	61,617	178,641	115,068
June.....	127,967	113,354	83,538	53,813	94,255	7,622	88,495	9,427	48,510	6,338	86,710	22,950
July.....	2,034	20	56,928	37,482	43,079	608	31,259	12,496	33,627	24,469	25,989	47
August.....	9,377	6,815	29,410	25,066	4,952	.....	29,220	27,530	34,514	43,845	24,256	83
September.....	293,189	8,874	109,237	6,086	42,269	.....	38,257	22,967	31,910	94	56,153	152
October.....	1,301,783	124,557	508,144	37,232	188,968	821	145,110	22,967	224,054	15,138	154,331	4,223
November.....	1,575,672	1,379,369	936,696	655,477	241,101	44,380	663,262	475,749	294,593	177,532	223,865	82,993
December.....	597,096	484,684	371,195	153,503	120,020	5,020	321,605	279,633	192,333	68,529	299,198	178,946
TOTAL.....	7,127,688	4,928,417	6,135,732	4,594,121	2,061,001	701,586	1,924,660	1,122,238	2,341,094	1,527,020	1,405,012	498,467

	1936*		1937		1938		1939		1940		1941	
	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.
January.....	115,042	43,699	89,966	51,063	39,056	168	43,062	517	53,496	3,701	24,382	3,352
February.....	39,133	4,697	75,159	49,422	40,695	2,386	40,781	394	42,138	10,002	42,573	2,184
March.....	137,570	91,106	85,797	61,175	50,442	5	178,084	115,793	33,688	10,866	50,274	7,126
April.....	80,225	63,536	141,871	105,839	59,752	2,597	80,871	59,363	284,345	247,285	69,478	29,942
May.....	119,739	61,018	88,065	40,105	196,257	111,551	45,317	2,630	139,918	118,838	71,322	33,170
June.....	205,582	183,028	61,512	17,746	109,749	1,498	32,113	33	229,774	187,507	188,786	120,893
July.....	105,989	90,264	28,906	163	31,664	4,070	15,581	918	17,735	1,323	55,127	9,837
August.....	33,488	11,901	11,020	48	12,710	.....	9,402	107	21,990	3,011	31,688	1,231
September.....	24,249	929	37,082	42	112,806	21,006	53,181	44	50,731	6	32,111	.....
October.....	28,693	6,378	155,340	18,093	47,894	57	90,081	3,417	76,406	6,675	97,317	4,124
November.....	155,993	96,980	134,207	4,007	106,063	32,758	81,275	18,152	73,277	22,051	178,454	11,418
December.....	131,470	67,862	77,418	2,961	41,936	1,256	85,897	36,737	101,774	10,525	143,689	6,039
TOTAL.....	1,171,173	721,396	986,343	350,664	849,024	177,352	755,645	238,105	1,145,272	621,790	985,201	229,336

*—Includes seed potatoes prior to 1937

Table No. XXVI—Exports of Table Potatoes by Months—Total and to the United States (Bushels) 1930*-1955—(concluded)

	1942		1943		1944		1945		1946		1947		1948	
	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.
January.....	46,856	637	29,450		49,256	1,500	463,906	454,707	72,324		204,079	18,740	188,382	76,526
February.....	36,740	1,375	23,335	10	40,594	2,200	857,770	830,193	46,222		237,447	183,166	144,269	116,889
March.....	50,135	1,612	30,970		36,193	90	1,026,611	965,500	26,323	13	801,410	708,786	97,332	60,440
April.....	61,622		56,825	5,253	16,958		895,822	798,952	40,371		852,705	384,934	61,134	10,209
May.....	51,711	17	37,173	3,913	116,811	43,440	470,512	364,568	84,071	42	1,745,873	313,708	111,079	12,716
June.....	29,124	206	28,494	45	385,403	279,024	46,540	6,349	24,660		2,256,311	607,342	58,818	2,369
July.....	47,908	84	14,933		158,014	131,845	8,918	110	44,906	8,204	91,025	34,353	50,005	7,732
August.....	32,049		14,915		390,336	367,108	26,345	5,818	54,803	12,814	314,787	15,894	54,240	20,712
September.....	21,859	1,773	15,230	34,685	335,859	321,075	43,584	3,837	40,843	2,445	67,823	4,593	272,932	204,901
October.....	60,041	726	35,242	13,912	1,222,089	1,170,229	70,654	1,533	103,040	9,807	258,135	133,238	1,041,014	357,733
November.....	56,202	1,368	80,989	5,819	228,171	599,400	112,997	27	448,168	77,806	333,732	221,875	505,940	350,220
December.....					588,268	545,000	54,570	725	137,106	55,098	445,611	232,635	340,760	123,197
TOTAL.....	509,162	7,798	413,930	63,646	4,067,952	3,460,971	4,078,229	3,433,319	1,213,904	166,319	7,669,541	2,859,284	2,925,975	1,967,797

	1949		1950		1951		1952		1953		1954		1955	
	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.
January.....	110,280	15,403	380,143	148,628	361,932	171,507	27,150	5,294	222,408	183,525	549,049	284,922	60,056	30,560
February.....	47,417	1,717	518,173	354,428	134,157	17,706	20,324	2,786	314,836	263,214	313,855	43,469	59,100	34,127
March.....	63,872	6,814	332,263	243,952	133,156	40,154	25,305	2,501	146,380	92,214	161,845	72,774	80,426	32,969
April.....	84,590		594,693	446,007	333,156	250,330	33,246	2,103	165,471	47,145	141,075	5,825	65,925	32,760
May.....	108,461		571,065	410,640	538,425	388,628	42,188	32,688	123,847	22,695	155,595	34,211	43,752	19,650
June.....	239,903	9,041	434,015	293,033	538,425	378,568	34,597	28,307	131,664	40,321	181,204	64,202	22,419	2,954
July.....	143,470	88,715	87,454	30,382	160,451	62,049	3,769	1,206	51,794	7,439	75,713	25,804	13,465	901
August.....	60,965	40,898	28,833	11,033	20,577	11,166	5,037	2,068	10,406	3,737	11,314	1,274		
September.....	144,318	117,877	16,770	2,597	10,885	6,570	17,087	3,180	38,237	896	11,911	1,949		
October.....	833,090	793,499	320,443	290,952	36,447	6,570	66,960	51,064	79,715	25,194	22,563	4,548		
November.....	706,269	604,601	174,681	74,342	133,471	24,382	225,362	173,506	380,438	101,418	47,326	17,041		
December.....	269,012	162,512	408,790	291,247	179,079	37,878	149,157	93,666	430,272	205,700	62,473	26,117		
TOTAL.....	2,981,647	1,841,077	3,917,323	2,597,241	2,646,218	1,390,006	650,182	398,389	2,095,403	994,733	1,738,153	582,136		

* Includes seed potatoes prior to 1937.

Source: Dominion Bureau of Statistics.

**Table No. XXVII—Exports of Seed Potatoes by Months—Total and to the United States
(Bushels) 1937*—1955**

	1937		1938	
	Total	To U.S.A.	Total	To U.S.A.
January.....	144,935	78,330	42,980	4,222
February.....	36,005	31,941	13,342	4,733
March.....	61,422	59,172	100,915	97,358
April.....	54,865	50,075	39,173	35,455
May.....	87,146	85,923	42,248	30,966
June.....	8,858	5,624	18,318	12,891
July.....	4,737	1,110	1,017	780
August.....			4,008	1,425
September.....	87,055	30,172	42,310	3,488
October.....	791,029	52,616	463,182	96,160
November.....	349,732	63,995	326,544	314,169
December.....	645,439	174,428	214,809	133,538
TOTAL.....	2,271,223	633,386	1,308,846	735,185

	1939		1940	
	Total	To U.S.A.	Total	To U.S.A.
January.....	337,297	137,459	206,415	64,653
February.....	33,169	21,846	57,338	13,079
March.....	51,411	39,426	52,523	26,310
April.....	36,722	35,535	469,032	458,731
May.....	21,930	14,286	66,358	50,471
June.....	1,522	901	47,621	44,262
July.....	158	158	1,465	1,465
August.....			521	
September.....	54,034	1,408	36,890	
October.....	363,921	51,111	314,801	54,749
November.....	731,137	306,574	385,572	184,584
December.....	316,121	242,421	147,298	13,547
TOTAL.....	1,947,422	851,125	1,785,834	911,851

	1941		1942	
	Total	To U.S.A.	Total	To U.S.A.
January.....	177,232	42,440	418,899	179,411
February.....	38,084	30,279	59,296	39,306
March.....	225,024	203,373	143,833	132,377
April.....	169,918	160,714	60,489	53,941
May.....	59,182	55,122	19,725	11,874
June.....	11,436	10,792	2,632	966
July.....	15,322	1,190	625	
August.....	558	558	6	
September.....	51,201	10,964	62,298	4,143
October.....	147,681	5,511	37,496	13,523
November.....	326,305	92,388	407,343	276,145
December.....	81,019	63,169	222,343	166,787
TOTAL.....	1,302,962	676,500	1,434,985	878,473

SCHEDULE G—*Con.*

**Table No. XXVII—Exports of Seed Potatoes by Months—Total and to the United States
(Bushels) 1937*-1955—(continued)**

	1943		1944	
	Total	To U.S.A.	Total	To U.S.A.
January.....	131,001	48,945	334,975	108,792
February.....	64,195	57,859	80,769	70,684
March.....	303,725	289,819	120,196	115,743
April.....	218,712	206,266	88,935	86,736
May.....	27,518	26,620	267,722	259,889
June.....	17,922	17,397	52,740	50,594
July.....	800	800	1,375	90
August.....				
September.....	12,426	11,000	7,275	
October.....	72,445	54,068	271,691	129,056
November.....	311,268	172,555	736,912	602,613
December.....	191,301	171,293	575,294	571,363
TOTAL.....	1,351,313	1,056,622	2,537,884	1,995,560

	1945		1946	
	Total	To U.S.A.	Total	To U.S.A.
January.....	558,245	319,524	586,037	324,663
February.....	288,338	282,063	213,307	201,285
March.....	536,146	367,963	287,490	275,605
April.....	430,608	316,775	177,549	160,850
May.....	101,890	90,586	112,465	57,557
June.....	8,545	8,420	23,440	9,775
July.....	47		22,084	1,520
August.....			237	
September.....	29,792	7,285	70,597	
October.....	163,605	23,133	244,557	44,205
November.....	541,917	414,787	671,509	428,606
December.....	503,883	332,941	834,365	553,918
TOTAL.....	3,163,016	2,163,477	3,243,637	2,057,984

	1947		1948	
	Total	To U.S.A.	Total	To U.S.A.
January.....	729,064	406,283	706,440	653,635
February.....	126,216	108,299	450,613	217,317
March.....	149,068	110,700	435,383	309,200
April.....	342,363	302,731	304,464	298,573
May.....	290,295	285,341	88,777	51,937
June.....	72,408	59,545	5,115	5,075
July.....	2,785	2,785	2,552	1,500
August.....	3,771	3,771		
September.....	2,019	554	6,254	1,005
October.....	140,279	31,988	370,963	165,026
November.....	1,349,495	380,033	1,734,065	1,524,349
December.....	1,049,398	524,467	1,239,310	1,014,090
TOTAL.....	4,257,161	2,216,497	5,343,936	4,241,707

Table No. XXVII—Exports of Seed Potatoes by Months—Total and to the United States (Bushels) 1937*—1955—(Concluded)

	1949		1950		1951	
	Total	To U.S.A.	Total	To U.S.A.	Total	To U.S.A.
January.....	778,070	601,627	984,399	845,779	1,258,016	997,988
February.....	611,387	486,060	610,101	596,292	1,106,612	1,072,291
March.....	1,221,183	1,215,964	755,558	709,041	191,676	190,628
April.....	1,371,206	1,367,099	691,477	685,987	220,030	180,465
May.....	766,114	762,681	459,165	456,959	157,125	156,011
June.....	146,738	146,738	118,554	118,096	29,015	28,150
July.....	3,003	3,003	5,793	5,778	7,416	7,402
August.....	166	166				
September.....	6,258		3,819		62,942	
October.....	391,568	129,825	221,534	2,247	79,325	4,269
November.....	1,867,932	1,746,229	358,810	117,032	218,053	84,294
December.....	956,256	636,138	684,967	344,118	507,335	340,312
TOTAL.....	8,119,881	7,095,530	4,894,177	3,881,329	3,837,545	3,061,810

	1952		1953	
	Total	To U.S.A.	Total	To U.S.A.
January.....	541,333	244,169	493,115	345,507
February.....	235,909	203,078	658,197	612,849
March.....	30,328	26,862	260,612	255,768
April.....	135,992	129,594	198,155	194,220
May.....	202,750	199,452	86,629	85,882
June.....	91,077	91,077	17,407	17,353
July.....	2,263	2,263	1,549	1,549
August.....				
September.....	3,339	750	17,476	
October.....	114,109	27,869	438,847	11,568
November.....	460,002	239,126	734,993	211,271
December.....	439,087	120,061	483,888	317,346
TOTAL.....	2,256,189	1,284,301	3,390,868	2,053,313

	1954		1955	
	Total	To U.S.A.	Total	To U.S.A.
January.....	526,001	386,329	358,464	241,580
February.....	153,164	150,863	182,444	152,682
March.....	118,034	108,429	182,172	176,842
April.....	165,458	163,161	191,107	118,160
May.....	281,591	273,676	39,530	37,463
June.....	76,339	76,339	2,475	2,219
July.....	4,095	4,095		
August.....				
September.....	17,029			
October.....	153,323	1,000		
November.....	482,315	169,967		
December.....	596,856	380,584		
TOTAL.....	2,574,205	1,714,443		

*Seed Potatoes included with other potatoes prior to 1937.

SOURCE: Dominion Bureau of Statistics.

SCHEDULE G—*Con.*

**Table No. XXVIII—Consumption of Potatoes—United States and Canada,
1930 - 1953**

(Apparent Domestic Disappearance)

Year	Canada per capita	United States per capita
	lbs.	lbs.
1930-31.....	254	130
1931-32.....	308	134
1932-33.....	224	132
1933-34.....	233	130
1934-35.....	280	134
1935-36.....	213	140
1936-37.....	211	128
1937-38.....	226	124
1938-39.....	187	127
1939-40.....	180	121
1940-41.....	226	121
1941.....	194	126
1942.....	182	125
1943.....	189	124
1944.....	173	135
1945.....	157	120
1946.....	178	122
1947.....	142	124
1948.....	164	104
1949.....	159	109
1950.....	178	101
1951.....	143	108
1952.....	147	101
1953.....	158	102

NOTE: 1930-31 to 1940-41—Crop Years, Canada; Calendar Years, United States.

SOURCE: Dominion Bureau of Statistics.

Table No. XXIX—Potatoes used in Manufacturing, 1937 to 1953

Year	Pounds	\$
1937.....	21,847,000	70,793
1938.....	18,043,000	56,297
1939.....	12,862,000	62,535
1940.....	38,433,000	185,961
1941.....	93,627,000	444,175
1942.....	64,154,000	469,084
1943.....	53,165,000	458,660
1944.....	100,702,000	763,496
1945.....	64,476,000	600,504
1946.....	115,976,704	1,450,997
1947.....	135,708,225	1,099,699
1948.....	71,103,531	820,857
1949.....	85,807,527	922,400
1950.....	98,903,043	963,867
1951.....	142,270,749	1,624,947
1952.....	66,029,483	2,239,480
1953.....	101,370,302	1,887,159

Production of Potato Chips (Factory Made)—1932 to 1953

	Que.	Ont.	B.C.	Other Prov.	Canada	
	lb.	lb.	lb.	lb.	lb.	\$
1932.....	*	*	*	....	64,856	20,282
1933.....	*	27,000	*	....	51,795	15,007
1934.....	*	55,028	*	....	83,028	23,581
1935.....	*	108,372	*	....	163,372	49,012
1936.....	*	121,702	*	....	206,472	64,617
1937.....	*	219,435	*	....	356,521	103,415
1938.....	95,276	208,968	*	....	382,244	111,222
1939.....	89,317	242,063	*	*	423,380	123,346
1940.....	159,654	301,672	*	*	559,859	150,582
1941.....	215,255	571,900	*	*	980,301	301,293
1942.....	848,111	860,366	*	*	2,033,817	591,699
1943.....	937,596	1,030,942	*	*	2,289,207	755,696
1944.....	885,542	935,180	*	*	2,154,709	830,934
1945.....	1,429,523	884,766	104,436	*	2,593,101	929,056
1946.....	907,147	1,145,402	98,247	*	2,407,868	925,187
1947.....	1,139,027	874,749	93,706	*	2,394,778	1,019,866
1948.....	2,173,643	1,276,205	137,059	*	4,087,035	1,923,391
1949.....	2,988,454	2,692,658	330,815	*	6,411,991	2,994,058
1950.....	3,456,277	3,083,298	467,925	*	7,627,319	3,753,417
1951.....	4,180,466	3,075,734	402,570	*	9,153,045	5,186,105
1952.....	5,970,027	3,060,913	1,052,465	*	11,225,361	5,976,510
1953.....	....	....	....	....	13,408,730	7,475,234

*Fewer than three establishments reporting.

SOURCE: Dominion Bureau of Statistics

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OTTAWA, 1955.